



Minicom Photography

APRIL 1949 25 CENTS 30 CENTS IN CANADA

The NATURAL look By Philippe Halsman



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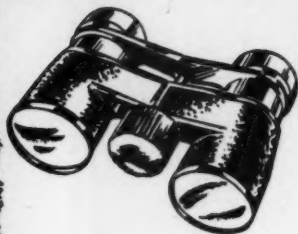
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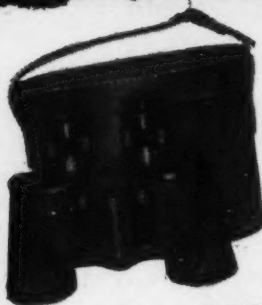
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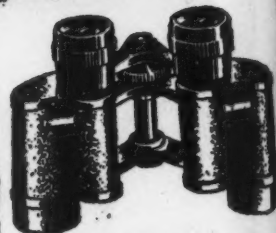
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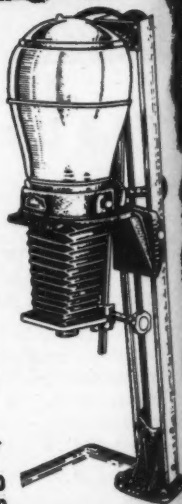
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"TOO MANY CATS"

See Action with a Graflex, pg. 84

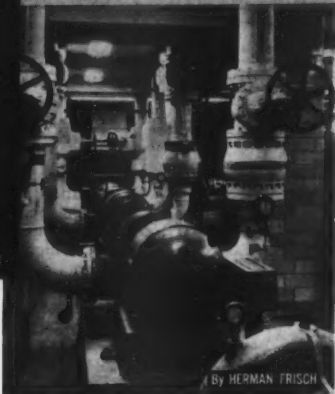
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How to Merge ART with SCIENCE in PHOTOGRAPHY



By ROLF L. SCHILLING

2. "Unusual" is the word for this fashion shot (above) by ROLF SCHILLING. Before coming to SMP, (which was recommended by a professional-photographer friend), SCHILLING studied art in Switzerland for eight years. When he graduates, talented SCHILLING will work for a large commercial studio... hopes to have his own studio soon. Studios owned by SMP graduates dot the nation, from coast to coast!



By HERMAN FRISCH

3. No time lost in getting started for SMP graduate WILLIAM GAY (see left). While still a student, GAY landed an important assignment for a large photo firm. That's rapid progress for a student with no previous camera experience. Both GAY and the School's modern courses get the credit!

By WILLIAM GAY

4. Amazing versatility is displayed by SMP graduate LESTER CORBIN (see left) who takes on all types of assignments from portraiture to aerial publicity! Corbin's the plucky photographer we wrote about in last month's column (see March issue of *Popular Photography* or *U.S. Camera*). His studio in Clayton, New York, is growing by leaps and bounds. Writes Corbin, "I owe a lot to the wonderful instructors at SMP. They gave me the self-confidence every photographer must have to do his best."



By LESTER CORBIN

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6. This is the way to photo-success! "Springboard to fame" for careerists of all ages is SMP, where specialized courses and advanced techniques are available. Tuition fees? Surprisingly moderate for complete study programs, day or evening. For outline of courses, visit SMP—or write H. P. Sidel, Director, Dept. M-4.

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1. Preparing for success in photography are many veterans, studying at SMP under the G.I. Bill of Rights. From the Air Corps came HERMAN FRISCH (see left) eager to acquire thorough photographic know-how. Now he hopes to join a commercial studio near his home town in Michigan.



By THOMAS SCICCHITANO

5. It's clear as her profile—more students attend more SMP courses than any other photographic school because SMP methods, faculty and facilities are unsurpassed. That's why THOMAS SCICCHITANO (see above) chose the School. Now a graduate, he'll do his sensitive shooting for a New York commercial studio.



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THE LAST WORD

He Knew Billy Bitzer

Sirs:

I especially enjoyed your article *Billy Bitzer, Hollywood's First Ace Cameraman* in the March MINICAM. I knew Billy very well and we were good friends right up to his death. During his active days we were strong competitors. I was making "Joan, The Woman" when he was shooting "Birth Of A Nation." I remember a talk I had with Bitzer in 1935 in which he recalled in vivid detail the incidents and people who played a part in creating the epic picture *Birth Of A Nation*. Your story covered this material very nicely.

American Society of Cinematographers
ALVIN WYCKOFF
Hollywood, Calif.

• Many readers ask for information about the people who made history in various fields of photography. From time to time MINICAM will present stories of outstanding photographers of the past.—Ed.

Skip The Grease?

Sirs:

Mr. Foldes' article *Highlights From A Bottle* in the February issue leads me to believe he had his bottles mixed. There are very few females who like their skin to have an oily look; if there were, the face powder business wouldn't be going full strength to cover my lady's shiny nose. Normally a person sitting under hot lights for a portrait will produce enough oil of their own to provide all the highlights necessary with the proper lighting for good portraits in either high key or low key. Mr. Foldes' original portrait of the young lady is flat from poor lighting, not from lack of artificial highlights. Moreover the pretty model has a much more pleasant expression in the original than in the doctored print. This might be because she felt very uncomfortable with the excess oil on her face.

There are instances when oil and grease are valuable to a photographer—when he wants to make a subject appear to be perspiring, for instance. But I, for one, hope that the days of greased models are over (remember all of the greased nudes of the past?)

Photographer
Macon, Ga.

BILL MERIWETHER

Highlights In Fifties

Sirs:

In *Highlights From A Bottle*, Mr. Foldes explains a little trick for obtaining artificial highlights that I have been using successfully for years. The only thing lacking in Mr. Foldes

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article was a formula. I'd sum it up like this: Use one-fifth the amount of highlight grease you think you need—then wipe off four-fifths of what remains. The fractional amount remaining is still a little too much but go ahead and shoot. At least your picture won't be dead from lack of highlights.

Photographer
Akron, Ohio

GERALD FELION.

Doesn't Need "Adapting"

Sirs:

I am a 17 year old high school student and have been taking and processing photographs for about 2½ years. During this time I have had approximately 120 photographs published in magazines and newspapers.

Concerning the article *Shoot Action With A Reflex* by Francis Reiss, what does Mr. Reiss mean in saying he "wishes he could take action pictures with a reflex camera?" Compare the enclosed action picture of the motorcyclist riding the wall of a carnival motordrome with



similar pictures made with any other camera. I used a Kodak Reflex—and it doesn't have to be "adapted" for action work; it has a built-in eye level viewfinder.

Carthage, Mo.

DWIGHT DAVIS

• You are to be congratulated upon having so much work published, Dwight. But you seem to have missed the point in Mr. Reiss' article. He mentioned that some reflex cameras have built-in eye level finders for action work; therefore his article was slanted for reflex owners whose cameras lack these features. Judging by the motorcyclist picture, there are several tips in Mr. Reiss' article that you might find extremely helpful. This particular picture is so blocked-up in the highlighted areas that it does not reproduce well.—Ed.

From Argentina's Ambassador

Sirs:

I am writing you with the object of clearing up an error in the December 1948 issue of *MINICAM* in the article titled "*Journey to Argentina*".

Since I believe that the important mistake made by you is due to misinformation, I wish to inform you that the two enclosed photo-

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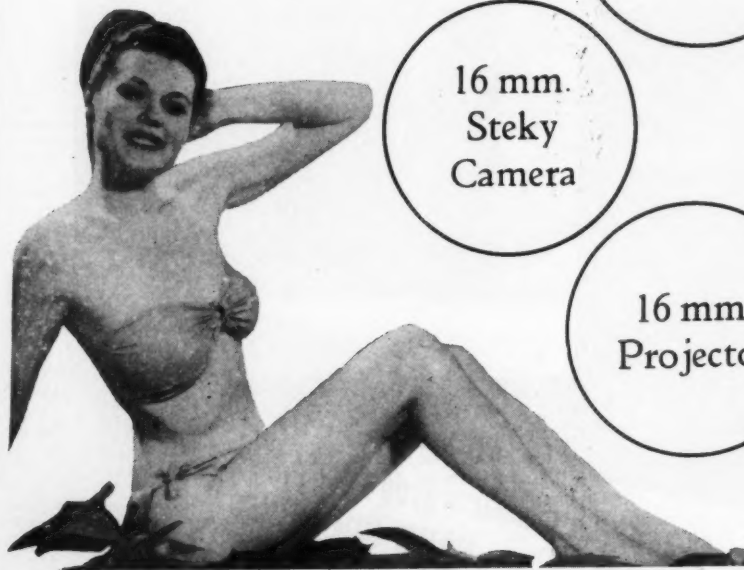
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graphs which make my country appear retrogressive and scarcely civilized are not of Argentina, simply because there are not natives as all that did exist have recently reached the same stage of civilization as the rest of the inhabitants of the country.

Washington, D. C. JERONIMO REMORINO,
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Embajada Argentina

• In the captions for the market-place scene referred to by Ambassador Remorino, and the



jungle scene reproduced above, the idea was to point out the wealth of picture-making variety existing within short plane hops from Buenos Aires. With no reason for wanting to make any nation's people appear retrogressive, it did not occur to us that such an interpretation would be inferred. Ambassador Remorino is correct in saying that these two pictures were not made in Argentina. Geographically speaking, they were made in Brazil.—Ed.

The Factory Way
 Sirs:

In the Last Word column for February, a reader told of his method of making double exposures with a Leica camera. The following method is one I learned at the Leica factory at Wetzlar, Germany, and is, I think, a simpler method.

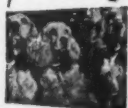
After taking the first exposure, hold down the shutter release button and turn the exposure knob backwards to the previous setting without lifting the finger up. This winds the spring without turning the film. When the setting has been reached, let up the shutter release and you are ready for another exposure. Any number of exposures can be made in this way on the same frame.

Smethport, Pa.

ALEXANDER McKAY

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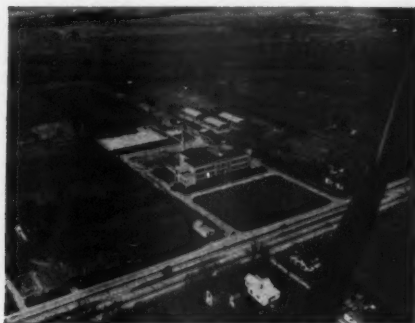
Airminded

Sirs:

Ben Ross' article *Air To Air* in the February issue interested me very much because I have tried my hand at aerial photography and was able to benefit by Ross' experience. I am enclosing a shot recently made from a lightplane with a 4 x 5 Speed Graphic. The scene is that of the High School on the Dixie Highway near my home.

Louisville, Ky.

CHAS. W. TAYLOR



We're Sorry, Sid

Sirs:

I was glad to see my color shot of Sun Valley skiers used on page 26 of your February issue, but I note the omission of a credit line for the photograph. The way the picture was used implies that it was made by Ray Atkeson who authored the *Take Your Camera To Winter's Wonderland* article. Both Ray and I are members of the American Society of Magazine Photographers and I'm certain he wouldn't want to receive credit for my picture any more than I would for one of his.

New York City

SID LATHAM

• All ASMP photographers feel strongly about proper credit for their pictures, because pictures are their bread-and-butter. We're sorry the credit slug got lost when the page was made up, Sid, and thanks for being so nice about it.—Ed.

Change Minicam's Name?

Sirs:

I agree with Mr. Hobalt who wrote in the March Last Word column that MINICAM's name is a misnomer. You no longer cater only to miniature camera users, so why imply by your name that you do? My suggestions for a new name for MINICAM are: *Creative Photography*, or *Photo Crafts*.

Indianapolis, Ind.

GEORGE BEAUFORD

Sirs:

If you want to keep the present size but change the name of MINICAM (which as a name really is obsolete), I suggest that you call your magazine *Photo Review* or *Photo Digest*.

Taos, N. M.

JOHN GONZALES

Have you tried *Candid Action Movies?*

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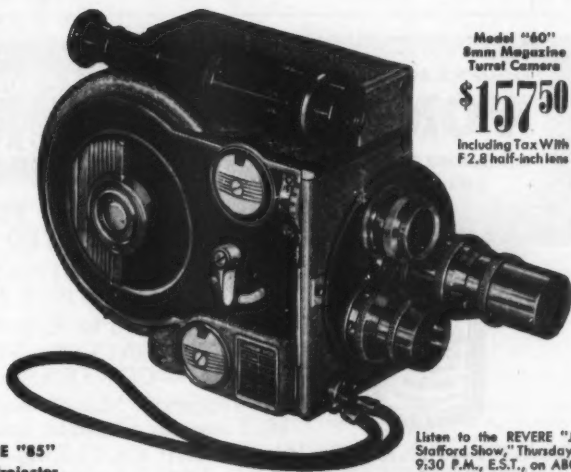


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REVERE CAMERA COMPANY, CHICAGO 16

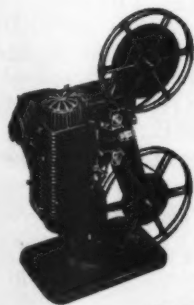
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Phoney Accents? Sirs:

In recent issues of MINICAM I have liked several pictures well enough to take a second look at the credit line for them. Each time, the photographer turned out to be Mr. Francis Reiss. Then in the February issue you published a diller of an article by Mr. Reiss (*Shoot Action With A Reflex—Ed.*) whom I had never heard of until recently. This adds up to a long way of saying that I like your way of giving young men a break instead of "name" photographers. There are some wonderful photographers with big reputations, but as I see it, a lot of the "big name" boys handle affected accents better than they operate cameras.

Westplains, Mo.

GERALD WILSON

Double Exposure With A Leica

Sirs:

In the February issue of MINICAM, reader Sol Gervich offered a solution to the problem of making double exposures with a Leica camera. As a much simpler method I offer the following Leitz recommend practice.

In all models of the Leica, except the 111C, it is necessary only to rewind the speed dial as far as possible in a counter-clockwise direction. It is then possible to release the shutter to make the second exposure. In using the 111C, it is necessary to depress the shutter release throughout the operation, releasing it when the speed dial comes to its limit. It then is ready for the

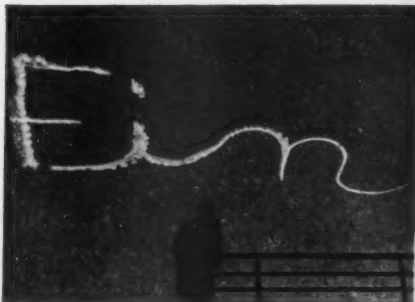
second exposure. As many exposures as desired may be obtained by this method.

WPG. WILLIAM EVELAND

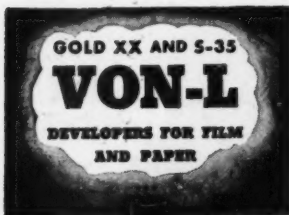
Hqs. Sq. 3345 T.T. Wng.

Hey!

I especially like this picture because to my way of thinking it demonstrates how a commonplace occurrence such as an airplane writing "I. J. Fox Fine Furs" can be turned into an uncommon photograph. On the East River Drive at 71 St. I saw the plane writing Fine and the man on the crossover bridge. I shouted to him "Hey, look up there." He



(Continued on page 113)



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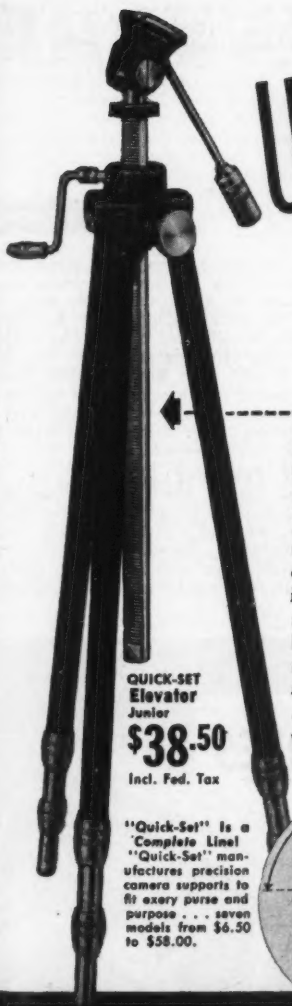
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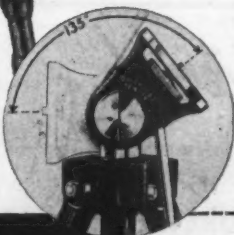
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PHOTO MARKETS



BY KIRK POLKING

The Philadelphia Zoological Garden, 34th Street and Girard Avenue, Philadelphia 4, Pennsylvania, in conjunction with its Diamond Jubilee program will conduct a nation-wide photographic contest during the Spring of 1949. Any photographs of *wild* animals (mammals, birds, reptiles, amphibians, fishes, insects, etc.) regardless of where they may have been taken will be eligible. However, because the contest is being conducted by the Philadelphia Zoo, any entrant that is selected for a prize will receive double the prize money if the picture was taken within the boundaries of the Philadelphia Zoological Garden. Prints must be not less than 5" x 7" and must be mounted on cardboard mats measuring 16" x 20"—the 20" dimension vertical. Black and white only or toned in one color are eligible. Colored prints, hand done or otherwise, are in-

eligible. No more than four prints may be submitted by one person and prints must be accompanied by a non-returnable entry fee of \$1.00. The contest closes May 8, 1949 and prints will be exhibited at the Zoo May 28th through June 5th. Prizes: \$25.00, first; \$20.00, second; \$15.00, third, and five \$5.00 honorable mention awards. A special award will be made to the camera club to which the first prize winner belongs. For further data write Roger Conant at the above address.

Maujer Publishing Company, 420 Main Street, St. Joseph, Mich. wants color shots of industrial scenes—power plants (interior and exterior), material handling, power transmission, compressors, Diesels. Verticals are preferred. Rate of payment, of course, depends on shots, but is somewhere between \$25.00 and \$60.00.

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Popular Mechanics Magazine, 200 E. Ontario St., Chicago 11, Illinois, can use news, novelty, human interest and action photographs. The photograph must be clear and have plenty of contrast, and should be a close-up view showing a person, or hands, in the act of using or operating the thing pictured. Photo should clearly show what it is and what it does, and how it works. They want new and unusual things, new products and inventions when they are on the market, the latest developments in the fields of science, mechanics, invention and discovery, provided they have a wide application and are of general interest to the average reader. Rate of payment: \$5.00 per photo and descriptive caption. One cent to ten cents per word for feature length articles of 1500 words.

MARKETING TIPS

A Second Look: Photographs fail to sell themselves to an editor for a variety of reasons. Some are not the photographer's fault—the editor is overstocked on the subject, he has run something like it too recently, or it's scheduled for early publication. But there are some definite faults that make a picture unsalable to an editor. Below are a few things to watch before submitting your next selection of pictures to an editor. From time to time, reminders for different phases of picture-taking will appear in these pages.

Pictures with a Point: What writers call "a single viewpoint" can well be used by photographers who want a more dramatic picture. Many would-be forceful photographs lose their punch appeal, their impact, by the fact that there is no singleness of interest, no strong point put across. Often, the actual subject forms too small a portion of the negative and lets the viewer's eye wander around the picture rather than drawing it immediately to the focal point of interest. Try to move in on the subject with your camera so that the action and important details fill the whole negative. Then you will have sharpness where you want it, and in making the enlargement from the picture, you will eliminate the tendency of "watering down" the contrasts and developing grain in the picture because you have to make a very big enlargement of the negative.

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- 2—Select the Brand New or Like New Camera, or equipment you desire in column one or two.
- 3—Deduct the trade-in allowance price from the Brand New or Like New Price.
- 4—Then rush us your equipment plus your remittance, or C.O.D. instructions for the balance due. MINIFILM will immediately forward the equipment you desire! Of course your selection is insured, because our 10 day FREE trial period. Full Refund terms, one year full guarantee, is always in effect at MINIFILM!

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Leica A, F3.5 Elmar	\$440.00	\$300.00	
Leica Standard, F3.5 Elmar	74.00	55.00	
Leica B, cpld, F3.5 Elmar	125.00	100.00	
Leica III, cpld, F3.5 Elmar	130.00	112.00	
Leica III, cpld, F2 Summar	165.00	130.00	
Leica IIIA, F3.5 Elmar	149.00	115.00	
Leica IIIA, F2 Summar	175.00	140.00	
Leica IIIA, F2 Summar	225.00	190.00	
Leica IIIA, F2 Summar	245.00	175.00	
Leica IIC, F3.5 Elmar	\$280.00	184.00	150.00
Leica IIC, F2 Summar	385.00	278.00	215.00
Leica IIC, F1.8 Xenon	400.00	300.00	225.00
Contax I, F2.8 Tessar	92.00	130.00	85.00
Contax II, F2.8 Sonnar	125.00	160.00	100.00
Contax III, F2.8 Sonnar	195.00	235.00	180.00
Contax III, F2.8 Sonnar	230.00	260.00	175.00
Contax III, F1.8 Sonnar	275.00	310.00	195.00

LEICA CONTAX LENSES AND ACCESSORIES

	New 100% Down	Like New	Trade- in
Leica Manual 1948	\$12.50	\$8.00	\$5.00
Gen. Leica Everready case	44.27	33.50	20.00
Leitz Chrome Vidom	77.90	48.00	35.00
Leitz Image Erecting Finder	77.90	48.00	35.00
35mm F3.5 Elmar Lens W.A.	123.20	74.00	60.00
50mm F2.8 Summar Lens	128.00	85.00	65.00
50mm F2 Summar	225.00	145.00	100.00
50mm F1.8 cpld, Sonnar for Leica	155.40	75.00	65.00
50mm F4 Elmar Tele Lens	238.00	108.00	90.00
135mm F4.5 Hektor Tele Lens	155.40	75.00	65.00
28mm Tessar F2.8 Contax	89.00	90.00	60.00
35mm Biogon, F2.8 for Contax	125.00	120.00	85.00
55mm Triotar F4 Contax	105.00	75.00	60.00
55mm Sonnar F2 Contax	110.00	85.00	65.00
135mm Sonnar F2 Contax	160.00	110.00	85.00
50mm Sonnar F2 Contax	75.00	60.00	45.00
50mm Sonnar F1.8 Contax	135.00	85.00	65.00
50mm Sonnar T, cpld, F1.8	165.00	125.00	85.00
Univ Revolving Finder for Contax	115.25	85.00	65.00

MINICAMS AT MINIFILM

	New 100% Down	Like New	Trade- in
Univex Mercury I, F3.5	\$17.50	\$10.00	\$5.00
Mercury II, F4.7 cpld lens	\$72.50	35.00	25.00
Argus A2, F4.5 cpld lens	75.00	21.00	15.00
Argus C3, F3.5 cpld, Flash	79.00	49.00	40.00
Perflex 101, cpld, F4.5 cpld	29.50	22.00	15.00
Perflex Deluxe, cpld, F3.5 cpld	85.00	50.00	40.00
Bolsey 38, cpld, F3.5 cpld	55.00	42.00	35.00
Retina IIA, F3.5 lens	197.83	144.00	100.00
Kodak 38, w/ rfr, F3.5 cpld	148.50	100.00	75.00
Kodak 38, F3.5 lens, case	83.00	50.00	45.00
Praktiflex F2.9 cpld lens	89.00	49.00	40.00
Kodak Bantam Spl, cpld, F2 lens	125.00	100.00	75.00
Minox, F3.5 lens	144.00	100.00	75.00
Kine Exacta, F3.5 Tessar, case	230.00	180.00	135.00
Kine Exacta, F2.8 cpld Biotar	285.00	255.00	185.00
Clarus, cpld, F2.8 cpld lens	115.25	85.00	65.00

ROLL FILM CAMERAS

	New 100% Down	Like New	Trade- in
Univ Roamer Folding, cpld	\$29.75	\$22.00	\$17.50
Univ Roamer II, F4.5 cpld	48.00	25.00	20.00
120 Monte Carlo, F4.5 cpld	48.00	25.00	20.00
120 Adon Folding, F4.5 Schneider	49.50	25.00	20.00
Prontor II, delayed action	49.50	25.00	20.00
Monte Carlo Mini, F3.5	75.00	47.00	38.00
Monte Carlo, F3.5 Special	83.75	47.00	38.00
Super Ikonta A, Tessar F3.5, cpld	285.00	125.00	95.00
Super Ikonta B, F2.8 Tessar	284.00	165.00	145.00
Super Ikonta BK, F2.8 Tessar	330.00	210.00	180.00
Model II, F3.5 Elmar, cpld	315.85	195.00	160.00
820 Kodak Tourist	71.00	55.00	40.00
F4.5 cpld, Flash Shutter	71.00	55.00	40.00

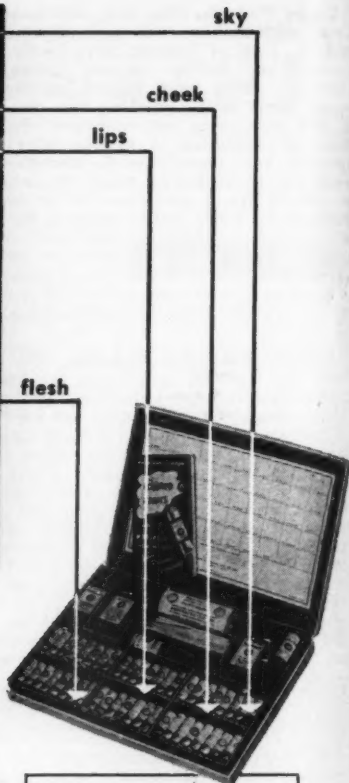
MINI REFLEX

	New 100% Down	Like New	Trade- in
Argoflex F4.5 cpld, cc	\$69.50	\$40.00	\$30.00
Argoflex F4.5 cpld, lens, cc	72.50	58.50	45.00
Ciroflex F3.5 cpld, Alphas, cc	85.48	87.00	60.00
Ciroflex F3.5 cpld, Rapax, cc	107.15	78.00	65.00
Ciroflex I, F3.5 Novar, cc	111.00	78.00	60.00
Reflex IIA, F3.5 lens, cc	127.00	105.00	85.00
Auto Roliflex, F3.5 Xenon, cpld	225.00	175.00	150.00
Auto Roliflex II, F3.5 T, cpld, Tessar, cc	391.00	235.00	190.00

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Philippe Halsman

This is his recipe
for the Natural Look



BY
PHIL BENET

WITH MODESTY becoming one of New York's best known creative fashion photographers, Philippe Halsman sketches his technique in making a natural looking color portrait. Says Halsman:

"Cooks who have had success with a tasty dish are often asked for its recipe. I feel flattered by your request to explain how it happened that my girl on the cover looks so natural and un-modelish; so, I am rushing my recipe to you.

"Here it is: Choose a girl that is neither self-conscious, nor high strung. Beware of the kind that freezes up in front of the

camera, or jumps when you click the shutter.

"Instead of using a brown foundation make-up, wait until the middle of a hot summer and select a girl with a medium sun tan. A pinch of freckles often adds to the success. Several authorities contend that if the lips are too pale, biting them will produce a more vivid coloring. In my opinion, a few photographers might not like to do that. The use of a medium red lipstick is then recommended as an easy and fast method.

"Beware of hairdressers and new dresses. Ask the girl to come to the sitting in the dress and with the hairdo she is wearing every day.

"Don't use any fancy backgrounds. A real wall or a real window will be a good choice. (If one wants to imitate my picture, put the model in front of a mirror. Choose an old, faded and dirty mirror to keep the reflection diffused and subdued.)

"If you can't use all natural lighting, eliminate it completely. Put one color corrected floodlight in front of the model. Keep it higher than her forehead but not so high that the shadow of her nose reaches the mouth. Put another color corrected flood light near the camera as a fill-in. Place a high spotlight behind the model to highlight the hair. If the girl is standing in front of a mirror discard the spotlight, since the mainlight will be reflected

THERESA WRIGHT without panchromatic makeup: a single floodlight simulates daylight. The result: a natural portrait of a wistful girl.





STUDIO publicity shots of Joan Leslie aren't released without the glamour treatment. Halsman's pictures of the stars are consistently untheatrical and free of tricky lighting.

in the mirror and take care of the back-lighting of the hair.

"Now take a meter reading. Suspicion and generosity should force you to shoot some film not only at the correct opening, but also to take a shot $3/4$ of a stop under and $3/4$ of a stop over the reading suggested by the meter. I always do it. In the case of the cover picture, the result

proved my generosity and my suspicion wrong. The normal exposure was the best. But on hundreds of other occasions this precaution saved the outcome of an important assignment.

"During the entire sitting keep a witty and brilliant conversation going with the model. If you are not born witty, do

(Continued on page 129)

Colorful Spring

BY JOE MUNROE

SPRING is a time of color contradictions for the photographer. To some people it means delicate, soft shades in daffodils, dandelions, and pale skies. To others, it may be a season of vibrant, almost sensuous, color combinations; most people think of Spring color as a bright new tie, an Easter bonnet, or whether or not to do the living room walls in Hunter's Pink or the latest in Belanciaga Brown.

Technique-wise, many spring days have too much atmospheric haze, and there are tricky variations in the amount of light for our exposure at this time of year; but otherwise the "standard procedures" will usually be the order of the spring day. Before we go into that, let's first examine some of the meaning of color in the spring, so that we can more effectively use our technique to transform our own feelings about spring into a color photograph.

The conceptions most people have of what is meant by the terms autumn, winter, or summer color, are fairly consistent. But mention spring color to a dozen different people and you'll get a dozen contradicting reactions.

Speaking broadly, autumn calls to mind vivid, crisp blocks of color. Winter reveals high key, or sombre, compositions in blue with bright flecks for emphasis. Summer brings bathing suits, colorful vacation days away from the city, and the earthy solid colors of nature in full production. But compared to the fairly consistent color themes of other seasons of the year, Spring offers a great variety of subtle, constantly changing combinations to look for from day to day—whether in nature, women's fashions or the shop windows.

"FIRST EDGE OF SPRING", by Joe Munroe, was made as the early spring sun warmed the hills of Kentucky. A Rolleiflex was used on a tripod with Ansco-color daylight emulsion and a synchronized #2B flashbulb. At about 10 to 12 ft. the 2B bulb on the camera is balanced as a shadow fill-in for average sunlight.





THE DESERT lays like a barren blanket over most of southern Utah. To this reddish-brown waste, sturdy Mormon farmers add green patches in the Springtime with precious irrigation water sluiced from high in nearby mountains. It is a harsh, uncomprising land of beauty and grandeur; and is especially well liked by lizards, snakes, tourists, and Hollywood "western" producers.

I had been shooting some color near Zion Park early one morning and was driving south, winding slowly down from the hills toward Hurricane and St. George. This scene unfolded on my right and had disappeared by the time we were able to stop, several hundred yards later. Often scenes that look exciting from a moving car are quite ordinary when viewed from a stationary position; the movement seeming to add a dimension as it presents an ever-changing angle.

This was the "key" picture for our story—the man-made patch of green surrounded by nature's desert.

The sky was broken-cloudy, but the air had not much haze; and it was intriguing to observe a blob of sunlight several miles square move with slow dignity across the thirty miles or so of our view. Luckily I was able to catch a moment when our green-town area was in sunlight, while the foreground and distance were under cloud shadows, thus accenting the most important portion of the picture.

Anso-color daylight was used in a Rolleiflex fitted with a haze filter. Several exposures were made due to the fleeting variations of the light, at various stop and shutter combinations up and down from a basic exposure of F:6.3 at 1/50th.

In spring there seems to be a special exuberance within us, a stretching and throwing off of the cramp, confinement, and discomfort of winter. All this shows itself in gay, uninhibited color schemes; of reds, greens, yellows, blues, pinks, purple, orchid, lavender. If we keep in mind this overall viewpoint of spring, and add to it the realization that "spring color" has a variety of meanings to different people; then we have a basis for seeking out those colorful facets of spring that are the most exciting to us, rather than going out with a preconceived notion of what subjects someone else thinks a spring color shot should contain.

We can be on the lookout for photographic subjects containing *different harmonies* of colors—instead of the *typical combinations* of colors of other seasons.

Take the color green, for example. In mid-summer, outdoors, there will be a monotonous tonality of greens, perhaps deadened with a tendency toward brown. In spring, however, we'll find many different modulations of green in the same scene. Different grasses, grains, trees, and growing things attain their peak of greenness at different times during a four-week period. By summer they've all caught up with each other.

Note the harmony of the four varying shades of green in the color shot "First Edge of Spring" that accompanies this article; and how the greens go "back" in depth as they get darker. In three more weeks they would have been pretty much all one tone. The white bridal wreath blossoms would be gone. The red-bud blossoms wouldn't have been there to play along with the maroon shirt. On the other hand, a few more days might have seen some iris blossoms instead of just yellow buds to work with the yellow scythe handle in this color scheme. About the only color note in this picture that is not a part of the ever-changing spring scene is the blue-jeans-blue-sky relationship.

It is smart when making color photographs in spring, in addition to spring-

(Continued on page 127)



"We were taking off the storm sash this spring," says Joe Munroe, "my wife washing them while I did the heavy work. I noticed the reflection of her at work in the glass leaning against the pine tree. I skipped in, got the camera and three minutes later was I ack on the job. The sun was on her, with the window next to the tree in shadow. The exposure was probably about F:6.3 at 100th. In a shot like this be sure to focus on the *apparent* distance of the reflected image, not on the window itself. In color this would be a pleasant spring shot with the green of the pine, blue sky, and gay colors in the housedress and improvised turban. The green and blue would mix together where they met in the combination reflected and real image in the glass."

Shooting below the red spectrum

Here are the answers to your questions on infrared films and filters.

DID AN OVERCAST sky ever lull you into spending a whole day on the beach with no thought of sunburn? If so, you probably learned that you owned your lobster-red complexion to invisible ultra-violet rays from the sun that passed through the clouds like water going through a sieve.

Ultra-violet rays are of short wave length. At the opposite end of the spectrum there exist radiations of long wave lengths called "infrared"—meaning "below the red." These rays, which are also invisible, have thrown open the doors to new photographic possibilities for they create a clarity of detail and an extension of range utterly beyond the limits of the naked eye, or the resources of ordinary camera use. In daylight, infrared can penetrate haze and render skies such a deep, dramatic black that white clouds seem fairly to jump out of the picture, while trees and grass have an unearthly white appearance. With infrared, it is also possible to take pictures in total darkness. Because of some of these achievements,



ABOVE: Al Getto is satisfied with the girls in the High Kickers number, but his friend Phil Leeds isn't so easily sold. Ralph Crane of Black Star made this candid shot in a dark theatre with infrared film and invisible flash. Opposite: The brilliant contrasts obtainable with infrared films in sunlight inspired Photographer Ewing Krainin to experiment with it for fashion work.

BY EDNA BENNETT

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the infrared process has caused a good deal of appreciative speculation—and also a lot of hocus-pocus. It is a fallacy that infrared rays can navigate ships through blinding weather, detect icebergs or guide airplanes into a fog-bound landing field. You can't even take pictures through fog with infrared.

It is a fallacy, also, that the practice of infrared photography takes unique equipment or training. It differs from ordinary photography only in that it uses special film and filters. Any photographer who is equipped to work with panchromatic film can make infrared pictures if he will follow directions—and the results will mean the addition of distinctive, unusual pictures to his album. One note of caution—some of the older cameras, bellows, shutter blades and dark slides are not entirely opaque to the infrared radiation and therefore produce fog. Most materials in modern cameras are safe.

A great many questions will pop into the mind of the photographer who is shooting infrared for the first time. The quickest method for you to get the necessary information is through the question-and-answer form. Here are the important facts concerning infrared photography.

Q. Is infrared a new process?

A. Not brand-new—the earliest infrared landscape photographs were taken as long ago as 1910 by Professor R. W. Wood. One famous aerial photograph by Major A. W. Stevens, U. S. Army Air Corps, was taken in South America in 1931 and shows the line of the Andes at a distance of 320 miles. Another, taken in 1932 of Mount Shasta, shows the mountain 331 miles from the camera.

Q. What is infrared film?

A. The emulsion of infrared film has been treated with special dyes sensitive to the infrared radiation. Some of these dyes have been in existence for a long time, but it was 1931 before a new dye discovery made infrared photography as simple as regular picture-taking.

Q. How is infrared film handled?

A. Infrared sheet film, plates and roll

INFRARED films and filters often record detail in distant objects clearly and sharply when atmospheric haze would have rendered them obscure on ordinary materials. Contrary to popular belief, however, infrared will not penetrate dense fog. In the picture below, Mt. Ranier was photographed from an altitude of 10,000 feet at a distance of about 75 miles. Seattle is in the foreground. Bradford Washburn used Aerographic Infrared Film and a Wratten 25 filter on this shot.

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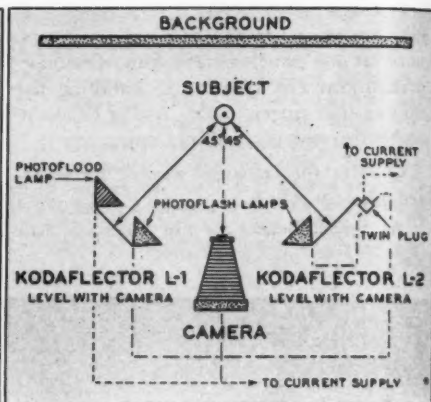
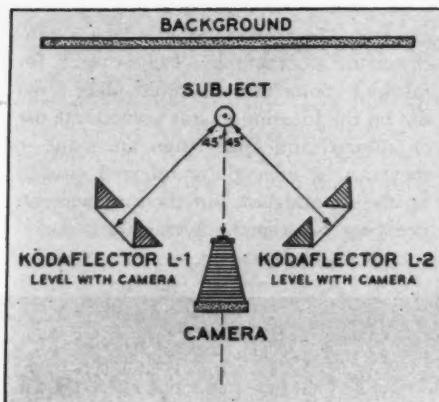
film are placed in the camera exactly the same as any panchromatic film. Ordinary precautions are followed in handling the film so that finger marks, undue exposure to heat or the sun will not cause fog.

Q. Are special lenses needed for infrared photography?

A. Special lenses are not necessary. Any

camera, if in good working order for panchromatic photography, can be used for infrared. Some manufacturers place a red dot on the focusing mount to facilitate use of infrared and some lenses are made so they can be focused for infrared visually on the groundglass, but these refinements need not concern the average amateur.





INFRARED photography isn't recommended for "straight" portraiture work because red lips come out light, flesh tends to become translucent, and eyes appear very black. But if you feel in the mood to try some experiments for unusual effects

you can use ordinary photoflood or photoflash lamps. Diagram above, left, shows a setup for infrared photography with photoflood lamps. Right, an infrared setup for using two photoflash lamps. (The photofloods are used only as a focusing aid.)

Q. What is the speed of infrared film?

A. It has an ASA rating of approximately 8 and is a moderately high-contrast film.

Q. What filters are used with infrared film?

A. A filter must always be used over the lens or light source to absorb blue and sometimes visible red light so that the picture is taken with infrared radiation only. The dark red or Wratten 25-A filter is used most frequently, but the Wratten 29-F, 70, 89, 88-A, 89 and 89A are also used.

Q. How does infrared penetrate haze?

A. In the ultra-violet range, the rays are scattered, but in the infrared range, they are freely transmitted through atmospheric haze so that distant scenes are recorded with far greater clarity than even the eye can see.

Q. What makes grass and trees appear white?

A. This surprising transformation is due to the substance chlorophyll (green coloring matter of grass and leaves) which is a strong reflector of infrared radiation so

that considerable tone can be built up on the sensitive film.

Q. What makes infrared skies black?

A. There is little infrared radiation present in blue skies so the infrared materials render it black.

Q. What lighting gives best white effects?

A. The snowy appearance of trees is at a maximum when the subject is taken with the sun behind the camera. Cross-lighting gives the least effect. If pictures are taken against the light, only the tops of the trees will glow with a halo-like light. Many night scenes in professional motion pictures are made in sunlight with infrared film. A moonlight effect can be produced by printing infrared negatives slightly darker than normal.

Q. How can you focus for infrared pictures?

A. Infrared rays, because of long wave length, do not focus in the same plane as visible light rays. It is necessary to make

an increase in the lens-to-film distance to correct this. Thomas H. Miller and Wyatt Brummitt sum it up neatly in their book "This Is Photography"—"There has been some controversy on focusing for infrared shots. While the infrared rays do converge slightly behind the focal plane of the other rays, the correction required is so slight ($\frac{1}{4}$ per cent) that it can be accomplished more practically by simply stopping down the lens to F:16 or more."

Q. Is a tripod needed for infrared pictures?

A. It is a good idea, since with long exposure necessary with a slow film, you eliminate the chance of movement by using a tripod.

Q. What exposures are required for daylight infrared?

A. The exposure required in bright sunlight (distant landscapes), using a Wratten 25-A filter, is about $\frac{1}{25}$ th of a second at F:4.5 or one second at F:22.

Q. Can an exposure meter be used for

REMEMBER this picture? Making ready the flight deck of the USS LEXINGTON for a strike was released early in January of 1945 and became one of the most popular infrared photos made during the war. Photo: U. S. Navy.



INFRARED EXPOSURE CHARTS

These indexes are intended for meters using ASA exposure indexes and for all Weston, G.E., and similar meters. The index applies when the film is exposed through the Wratten A Filter (No. 25) and developed as recommended. **Filters:** A filter must be used over the lens (or light source) to absorb the blue light to which the film is sensitive. For general photography, a Wratten A Filter (No. 25) is recommended; Nos. 29 and 70 require the same exposure. Nos. 88, 89, and 89A require 1.5 times, and Nos. 87 and 88A require double the exposure.

KODAK INFRARED SHEET FILM

Tungsten 8

A moderately high-contrast, infrared, antihalation film for distant haze penetration and for special effects in commercial, architectural, and landscape photography. With variations in development it is useful in certain types of scientific, medical, and documentary photography and photomicrography.

Safelight: Use a Wratten Safelight, Series 7 (green), in a suitable safelight lamp with a recommended bulb at not less than 3 feet. The Series 7 is for infrared-sensitive materials *only*.

Daylight Exposures: Subjects in Bright Sunlight.

Exposed Through Wratten A Filter		No Filter, for "Ordinary" Rendering
Distant Scenes	Nearby Scenes	Distant Scenes
1/25 sec at f/8	1 sec at f/22 or 1/10 at f/6.3	1/50 sec at f/16

Photoflood and Photoflash Exposures: With Wratten A, G, or F Filter.

DISTANCE, LAMPS- TO-SUBJECT	Four No. 1 Photofloods in Kodaflectors*		Two No. 22 Photoflash Lamps in Kodaflectors*
	Aperture	Time	Aperture—Open Flash
3 feet	f/16	½ second	f/32
5 feet	f/16	1 second	f/22

* If matte-surfaced reflectors are used, give double the exposure indicated above.
For dark-colored subjects; for light-colored subjects, use one lens opening smaller.

Processing

Develop at 68° F (20° C) for approximate times given below.

KODAK DEVELOPER	Continuous Agitation (Tray)	Intermittent Agitation† (Tank)
D-76* (General Use)	6 minutes	8 minutes
Microdol* or DK-20 (Fine Grain)	7 minutes	9 minutes
DK-50* (High Contrast)	7 minutes	9 minutes
D-19* (Maximum Contrast)	7 minutes	9 minutes
DK-50* (Medical Use)	9 minutes	11 minutes

* These developers are available in prepared powder form in several package sizes.
† Agitation at one-minute intervals during development.

KODAK INFRARED FILM (Miniature and Roll)

Tungsten 8

A moderately high-contrast, infrared film. With an orange or red filter it gives striking and unusual effects. Most commonly used for distant landscape photography, to produce detail ordinarily obscured by atmospheric haze. Also useful in medical, scientific, and documentary photography and photomicrography. **Safelight:** Use a Wratten Safelight, Series 7 (green), in a suitable safelight lamp with a recommended bulb at not less than 3 feet. The Series 7 is for infrared-sensitive materials *only*.

Daylight Exposures: Subjects in Bright Sunlight.

Exposed Through Wratten A Filter		No Filter, for "Ordinary" Rendering
Distant Scenes	Nearby Scenes	Distant Scenes
1/25 sec at f/8	1 sec at f/22 or 1/10 at f/6.3	1/50 sec at f/16

Photoflood and Photoflash Exposures: With Wratten A, G, or F Filter.

DISTANCE, LAMPS- TO-SUBJECT	Four No. 1 Photofloods in Kodaflectors*		One No. 22 Photoflash Lamp in a Kodaflector*
	Aperture	Time	Aperture—Open Flash
3 feet	f/11	½ second	f/22
5 feet	f/8	½ second	f/16

* If matte-surfaced reflectors are used, give double the exposure indicated above.
For dark-colored subjects; for light-colored subjects, use one lens opening smaller.

Processing

Develop at 68° F (20° C) for approximate times given below.

KODAK DEVELOPER	Continuous Agitation (Tray)	Intermittent Agitation† (Tank)
D-76* (General Use)	7 minutes	9 minutes
Microdol* or DK-20 (Fine Grain)	8 minutes	10 minutes

* These developers are available in prepared powder form in several package sizes.
† Agitation at one-minute intervals during development.

RINSE in water for about 10 seconds after development.

Blackout Flash: Photoflash Lamps Nos. 5R and 22R require no filter at the lens. Use exposure guide number 55 for No. 5R Lamp in 5-inch reflector; for No. 22R Lamp use 60 for 5-inch reflector, and 75 for 7-inch reflector. To obtain *f*-number, divide exposure guide number by distance in feet from lamp to subject. These lamps are obtainable from G.E. on special order only. For unusual subjects or uncertain light, make a series of different exposures.



LEFT. To make certain that the girl and pattern of the white net would stand out boldly against a dark sky, Pinney of Monkmeyer used infrared film and a red filter for this miniature camera shot. Opposite: Quebec landscape by Herbert Matter (Black Star). Notice how infrared film renders foliage white and sky dark.

setting the camera for daylight infrared?

A. Exposure meters are sensitive only to visible light and so give unreliable readings for infrared, since daylight varies in its ratio of visible to infrared radiation.

Q. Is there special film for infrared aerial pictures?

A. Kodak Aerographic Infrared film is a high-speed emulsion which is sensitive to infrared radiation as well as to the blue light of the visible spectrum. With this exceptional sensitivity, it is primarily useful in aerial photography for it obtains extreme haze penetration and high contrast, but there are other advantages. For example, bodies of water are rendered very dark in sharp contrast to land, with fields and wooded areas very light. Cities look darker than fields.

Q. What exposures are used in aerial infrared photography?

A. The actual diaphragm setting depends on prevailing light conditions, on degree of development and to a great extent on the terrain. Experience is the best guide, but green countryside requires less exposure than an industrial area. Typical exposure for land composed of city and surrounding areas on a bright day would

be 1/150th of a second at F:8 with the Wratten 25-A filter. The lens is set at infinity, as with ordinary aerial picture-taking.

Q. Can aerial infrared be taken with ordinary film?

A. Sheet film or roll film can be used but they are slower speeds. The exposure required would be about 1/100th of a second at F:5.6 with the 25-A filter.

Q. Can aerographic infrared film be used other than in the air?

A. Yes—some photographers prefer to use it because it is about three times faster than the ordinary infrared film. Weegee used it for most of his infrared work, with a typical exposure of 1/100th of a second at F:16 with the 5-R infrared flashbulb.

Q. Can infrared pictures be taken in total darkness?

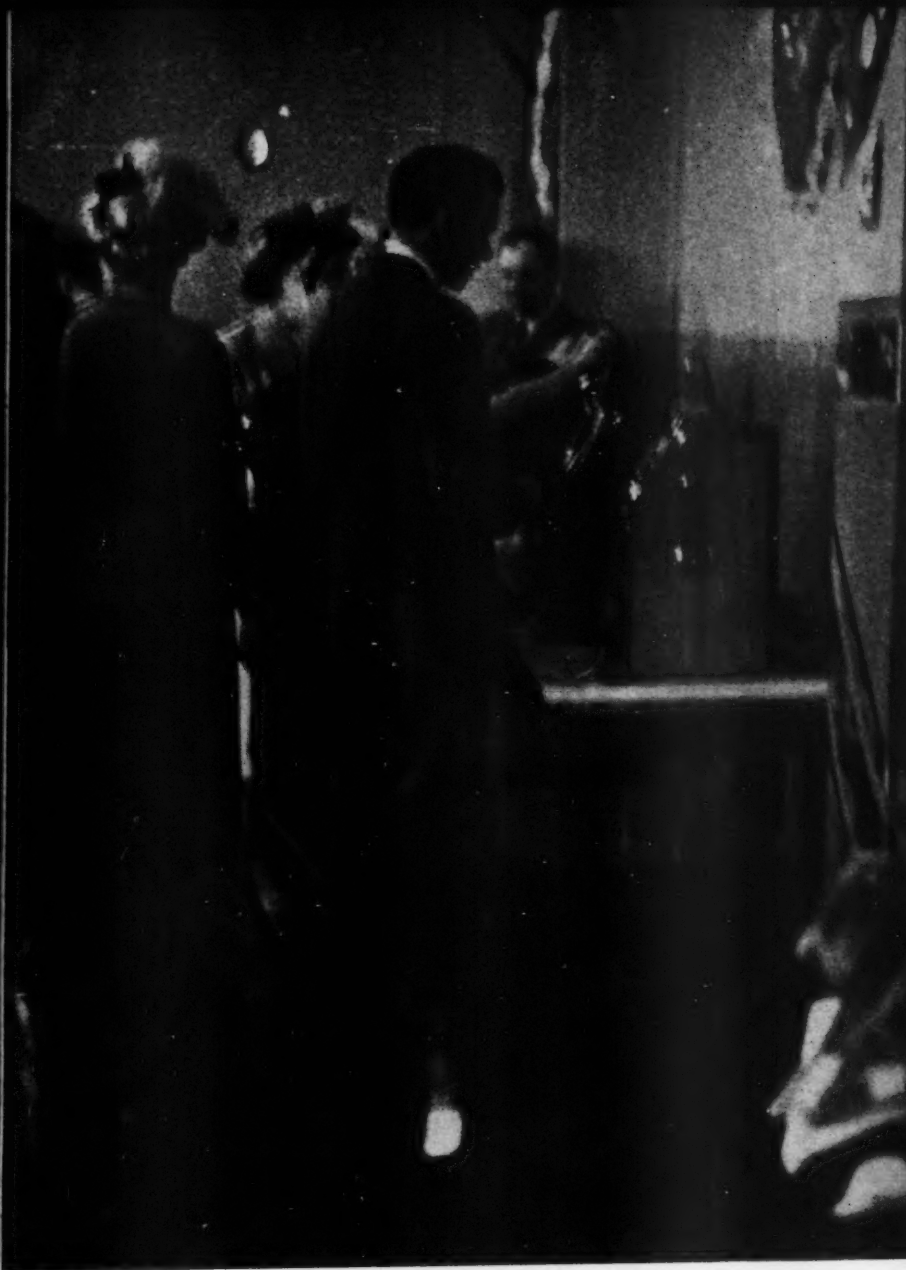
A. Yes, usually referred to as "blackout flash," it was first used to advantage during blackouts in war-time, hence its name. (See *Candids In The Dark*, March '49 issue.—Ed.)

It has also proved useful in criminal investigations.

Q. How is blackout flash achieved?

A. Infrared photography is the result of
(Continued on page 130)





my favorite picture



WHEN MICKEY PALLAS greets you in his second floor walk-up studio on Chicago's Near North Side, you mentally tag him as a photographer who has sometime or other known the smell of gym trunks and rosin. He is stocky, thick-chested, and wears shoulders that are obviously his own. His hands are massive with fingers that look too thick to do delicate things to a camera. And when he rocks back and forth on his toes, swaying slightly and striking his left palm with a loosely-balled right fist as he talks, the case is cinched. You know you are talking to an ex-pugilist. Probably a Golden-Glove contender of about five years back.

Naturally you are all wrong. Life would be too simple if everyone went around being what they look like they might be. So Mickey Pallas is an ex-band leader, a drummer who thought his name was Mitchell until a night club owner abbreviated it one night back in 1934 when a six-letter front name fitted into publicity copy better than an eight-letter name. "Now they're trying to whack two more letters off it," Mickey says. "Everybody nowadays seems to want to call me 'Mike.' Do you suppose," he adds deadpan, "it's because they think I'm Irish?"

There is a sameness about the studios of most young free-lance photographers in the midwest that makes you think of assembly-line architecture. Many consist of a single fairly large room in what was once a family residence. A closet has been converted into a darkroom, a desk in one corner is the "office," and aside from a posing bench and a discouraged wooden chair or two, the place is innocent of furnishings.

Mickey's studio is a carbon of all the others. It's a place to hang a hat long

(Continued on page 124)

The picture that photographer Mickey Pallas likes to live with isn't a technically fine studio shot. It's this fuzzy, 35mm "grab" shot. Here is the reason why . . .

MAGNUM

Three photographers with four pairs of pants conceived the idea in Paris. Now the world is their picture hunting ground.

BY JACQUELYN JUDGE

MAGNUM is a Latin word for "great;" it is also a two-quart bottle (usually of champagne); and it is the name given to one of the most fascinating experiments in the relatively short history of photography—a working, cooperatively-owned photographic agency. An agency, as you may know, sells photographers' pictures for a fee and schedules their picture taking.

To get to Magnum's New York offices, you wend your way through Greenwich Village, past art stores whose Matisse's are fragrant with the odor of garlic and spices. The address, 55 West 8th Street, is an unpretentious narrow building with the usual walk-up apartments. Magnum's offices are on the second floor and they look much like picture agencies everywhere: dozens of steel filing cases, a scattering of contacts and 11 x 14's covering almost every flat surface. There is a lighted frosted glass for viewing Kodies, and four young ladies earnestly prodding their typewriters.

Magnum, calls its annual business meeting the "General Assembly", concerns itself with the Big Doings of Man; yet it is as informal, joke-playing and happy-go-lucky as the Marx Brothers. Its three main offices—in New York, London, Paris—have the exciting, unreal quality of a movie set, and conversations are carried on in an international jangle of languages.

The five stockholders of Magnum are photographers Robert Capa, Henri Cartier-Bresson, David Seymour, George Rodger, and the manager of Magnum's main office, in New York, Maria Eisner. The

easiest way to tell you about them is to explain the germination of the idea of Magnum.

It was 1936 in Paris, and it was spring (in stories it is always spring in Paris). A newspaper editor advertised for pictures, and three young photographers answered his call. One was a Pole who had photographed a little boy spinning his hoop in the Luxembourg Gardens; the second a Hungarian whose reputation had been made with a picture of a murderer sipping wine with a look of peace upon his face; the third, a Norman Frenchman who had been charmed by an old woman selling flowers near Montparnasse. The young men were David Seymour, Robert Capa, Henri Cartier-Bresson.

When the editor had said "No" to each, they retired to a sidewalk cafe to talk things over with a bottle of wine. "At that time," recalls Capa, "we were more 'small Calvados' than Magnum."

Their conversation consisted of cooperative amazement at the editor's bad taste, cooperative wonder as to what they were going to eat for dinner, and cooperative ecstasy at the agreement in their photographic thinking. They decided that three could starve with less money and more humor than one, and forthwith began their first cooperative effort, sharing rooms, food, work, clothes—and dreams.

IN BARODA, on the West coast of India, Henri Cartier-Bresson's camera caught the sly humor of this scene before the palace gate. Living photographically in India, Cartier-Bresson sent out understanding and beautiful pictures, climaxed by the series on Gandhi's assassination and funeral.

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THREE YOUNG NATIVES.

left, in Tanganyika are the exotic subjects for the Africa-loving member of Magnum, George Rodger. The heads seem to form a pattern of steps and show front and side views of the weird pre-circumcision ceremonial headdresses without formal posing. ABOVE. African wild life provides an amusing frieze of giraffes seen at dusk in the Tanganyika bush, gossiping with each other. The horizon line which cuts their necks in two adds a further note of surrealist humor to the dream-like, misty quality of the photograph. It was made in pre-dawn light.

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Their possessions were talents and four pairs of pants (the fourth pair was always being cleaned or pressed), but they dreamed that one day the world would be theirs. And when the world was theirs there were certain rewards they would take.

Most young men under these circumstances fill their air castles with Cadillac convertibles—or perhaps Circassian dancing girls. What did they want? They wanted an ideal life for themselves as photographers—and they wanted to make this ideal life possible for other men. They felt that the maximum good in photographic working conditions was not to

be found either on a magazine staff or in an agency. A magazine would demand that they work by formula and specification, might distort their pictures by misleading captions. An agency would be interested primarily in exploiting them commercially as far as possible.

They put their dreams on paper with these thoughts:

1. An opportunity to take the pictures they wanted to take.
2. The chance for each man to look at the world about him, choose the story he wanted to do, do it, have it published if he could.

In order to reach this goal, they needed several very practical things: their own business, set-up administered by people who had their attitude toward photography, reputation enough to get the large amounts of money they would need, a minimum capital to finance themselves, until the first stories began to pay off. And all they had on that Paris day was the spirit of cooperation—and four pairs of pants.

As the novelists would put it, the years passed and our heroes grew in wisdom and reputation. They made their reputations in Spain during the Civil War as great news photographers. Seymour's work and Capa's appeared in the United States for the first time in *Life* magazine. Cartier's was used in *Harper's Bazaar*.

In that short time between the death of the Spanish Republic and the opening guns of World War II, Capa went to Mexico and China. Cartier produced a marvelous series of photographs on the coronation of George VI, some of which

are now in the collection of the Museum of Modern Art. Seymour came to New York and, since he could not yet speak English, had to limit his photographic activities to working for Leco, a professional photofinishing organization. There was much work, little money, and no chance to organize Magnum.

During World War II, Capa was at the front, Seymour was in the U. S. Army. Cartier was reportedly dead. He had been taken prisoner by the Germans in 1940. Finally, the day was at hand for the liberation of Paris (the spiritual cap-

WHEN THE IRGUN ammunition ship *Altalena*, below, tried to enter Tel Aviv during the United Nations truce period it was captured by Haganah troops. Robert Capa, eating breakfast on a hotel balcony, was able to scoop the world sitting at his table; the other correspondents had left on a trek to the front and he had overslept! TERESKA, right, a small girl at a school for mentally disturbed children in Poland, draws what she remembers of her home and family. Her answer of twisted and tortured lines is echoed in the facial expression caught by David Seymour's camera.



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ital of Magnum). Seymour, in Versailles, asked to go into the city, and his commanding officer loaned him a Jeep.

Equipped with steel helmet, tommy gun, and camera, he was walking up Montparnasse thinking: "Capa is not here. Cartier is dead. There is no one to call my name." Just then a voice from a table at a sidewalk cafe, called his name. The voice belonged to John Morris, now picture editor of the *Ladies' Home Journal*, at that time head of *Life's* wartime

European picture operation. "Come on," he said, "the French photographers are throwing a party for the Americans. Let's go."

"I will go," said the Dostoevskian Seymour. "I will go, but I will be unhappy." He arrived at the party to find Capa and a very much alive Cartier, drinking champagne!

It was then that the three decided to stop dreaming and start acting. The action had to begin with money. Capa



CERTAINLY, a photographer may be a romantic. David Seymour went walking one day in Rome and found four ancient Sphinxes keeping watch over four modern Italians sitting and sleeping in the sun.

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PABLO PICASSO and his infant son "made faces" for the camera of Robert Capa. He photographed the family life of Picasso this year at Antibes, showing him to be a warm, human person.

went to find the pot of gold at the end of the Hollywood rainbow. There by turns he impressed the moviemakers socially and depressed them economically. Seymour went to New York and back to work for Leco. Cartier came to the United States to supervise an exhibition of his work which had been scheduled when it was thought that he was dead.

In 1946 Capa gave up Hollywood and came to New York for a reunion with his old friends. Working on the theory that there are four or five great news areas, Magnum did Caesar one better and divided the world into four parts. The fourth was for George Rodger, who had often expressed a wish to work in such an organization. He cabled his "include-me-in" from Africa.

Rodger is an Englishman, a one-time

Life photographer who has always been fascinated by Africa. He likes the Dark Continent, loves its peoples, and finds the awakening nationalism, the pioneer spirit of making new countries from backward areas exciting story material. His project for this last year has been a monumental one—to cover the continent from Capetown to Egypt, from the diamond mines to the pyramids.

Fifth and last stockholder of Magnum is Maria Eisner, the business head of the organization, who has worked with the Magnum cast since the very early days in Paris, fifteen years ago. She cares for the photographers' bills and expense accounts, pacifies editors, smooths the pathways, supervises researchers, arranges assignments, keeps track of her world-jumping brood. She is a photographic



THE FUZZY TEACUPS in the foreground and the total disinterest in the photographer's presence make the viewer feel that he is also at this tea party. Note how the diagonal line of three heads as Cartier-Bresson photographed them leads the eye to examine faces and relationships again and again.

writer herself. Two of her articles—one on Bill Brandt, another on Andre Kertesz—have appeared in MINICAM.

Working together this group of five has created Magnum, an organization which offers its members both advantage and protection. Shortly after they set up shop another co-op agency called Scope Associates started and they, too, are doing well.

Magnum gives its members the prestige of an organization without the usual drawbacks, the basic financial agreement is simple. In order to build the necessary funds to carry out their ambitious plans, each Magnum photographer earmarks 25% of his earnings for the organization.

Besides the stockholder photographers, Magnum has an arrangement under which it sells and works with a few other photographers on a percentage basis.

The photographers are able to choose their own stories, and to work until the stories are completed to their satisfaction. There is the utmost of democracy in the running of the operation. No policy decision is made without the consent of all concerned. There is no pressure on one photographer from the others. For example, Cartier was asked to do a story on a mission school in India. He did not want to do it, explaining: "I have too great a respect for local religions and customs. My eyes bleed each time I see little Indian girls in western dresses, singing transplanted English songs."

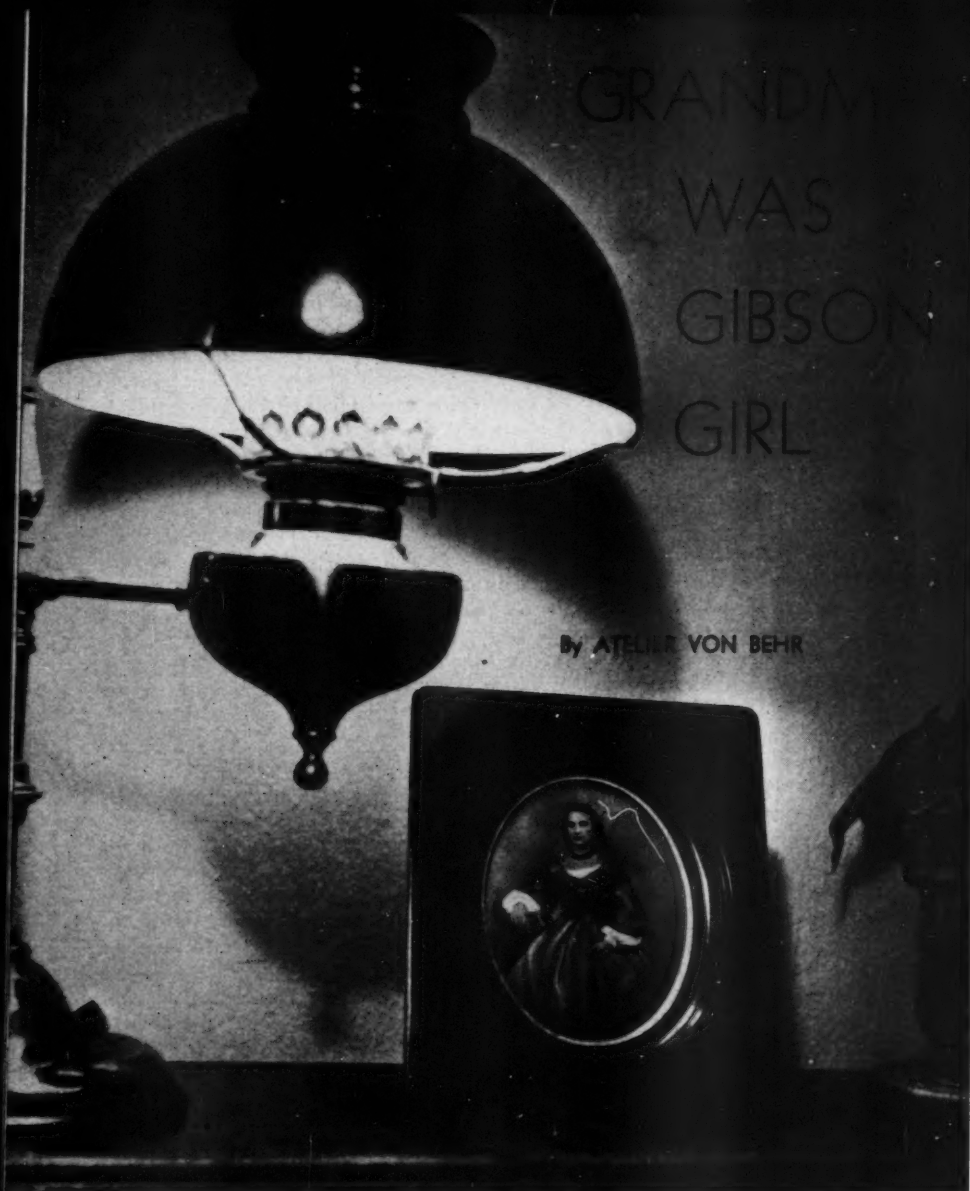
Magnum photographers, when they sell and when they work, represent themselves and not a magazine. Their rights are protected after the pictures are taken. Each man owns his own negatives. This is of great importance to professional photographers—since agencies or magazines retain all rights in the negatives of their staff photographers. Often a man who has literally risked his life for a photo-

graph does not have the legal right to reproduce his work in book form. A library of negatives is also an insurance against a poverty-stricken old age. The reporter can always write books about his exciting past, but the photographer cannot retake his photographs from an armchair. Each of Capa's Russian pictures bore a stamp which read: "This photograph can be reproduced only with the accompanying caption or with text strictly in the spirit of its caption." Cartier's photographs may not be cropped. This demand is made because, he says, he has trained his eye to see *exactly* what he wants to say. If something is cut from the scene, his statement has been distorted. The stamp on the back of his photographs reads: "Photos must not be altered by trimming."

The list of outstanding stories covered by Magnum's men in a year sounds like an endurance contest. Capa got into Russia (a scoop in itself) and covered the country thoroughly with John Steinbeck.

He went to Palestine, saw the birth of a new nation, scooped the world on the landing of the Irgun ship "Altalena," was at the front with American Col. David Marcus when he was killed; persuaded Picasso to let the world see an artist's family life. Seymour photographed the Italian elections in the spring and pushed through the Iron Curtain for UNESCO to show what kind of childhood tomorrow's rulers in Europe are enjoying. In India, Cartier covered the border fighting in Pakistan, saw the end of Gandhi's fast, pictured the aftermath of his assassination and was the only photographer allowed in the funeral procession. Pushing on to China, he saw the last days of Chiang's Peiping, Shanghai, and followed the refugees to Hongkong. George Rodger's contribution was less spectacular, but still important. He documented the

(Continued on page 110)



GRANDMA WAS GIBSON GIRL

By ATELIER VON BEHR

How to restore Nineteenth Century album prints to Twentieth Century wall miniatures

THE PLUSH-COVERED family album gathering dust in the attic is a paradoxical misfit. It is too valuable as a family heirloom to throw away, yet too old-fashioned to enhance a 20th Century parlor. Still if you

are handy with a copying camera and like to dabble with transparent colors, there is a way to convert the old album into a gold mine of photographic source material. Miniature copies of old prints, restored to

new color and set off by decorative frames, may actually "modernize" a blank wall area in your present home.

The first step in converting old prints to attractive miniatures is to slip the leash on your imagination as you turn the pages of the album. Take that picture of Grandmother at the age of 18, for instance. Although the print is faded, she reminds you of a pert, dashing Gibson girl in a high-collared shirtwaist. With curly blonde hair, blue eyes and a fair complexion, her blouse might very well have been pale blue. Visualize this picture, then as a charming miniature in full color, set in a small ebony frame. It could be used singly, or, if we could match it with another similar miniature, as one of a pair of pictures flanking the mirror over the desk.

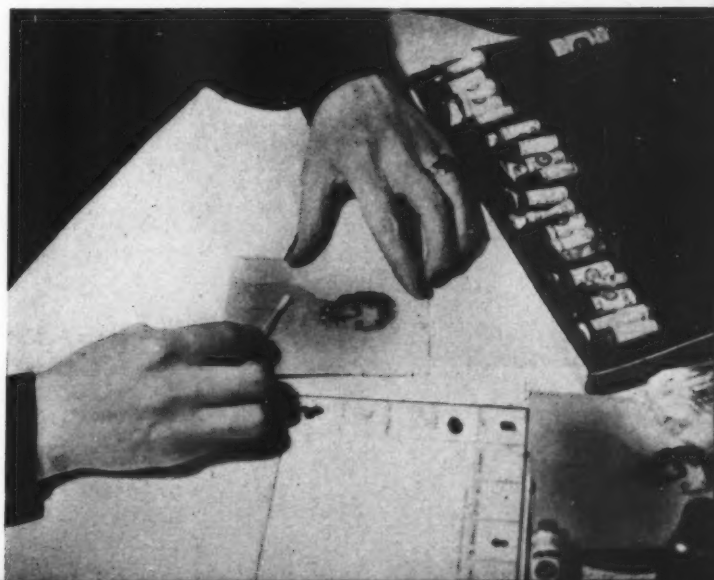
Great-grandmother in her hoop skirt is also a likely subject. Old rose for the dress with black fringe across the bodice and white at the throat and sleeves. Her necklace was probably made of garnets and her brooch and earrings of gold.

(Continued on page 118)



ABOVE: The album print to be copied can be fastened to a wall or door with thumbtacks or tape. If your camera has ground glass focusing, mount the picture upside down so it will appear right-side-up in the glass. Two photofloods, one on each side of the camera set at an angle of about 30°, will provide illumination without showing hotspots.

RIGHT: Copy prints made from album pictures should be printed on semi-matte paper if they are to be tinted with translucent colors. Sets of transparent water or oil colors are available from most photo dealers at prices ranging from \$2 to \$10. No other special equipment will be required.



Welcome

to the new season



◀ ART BURNHAM

ANDRE DE DIENES ▶

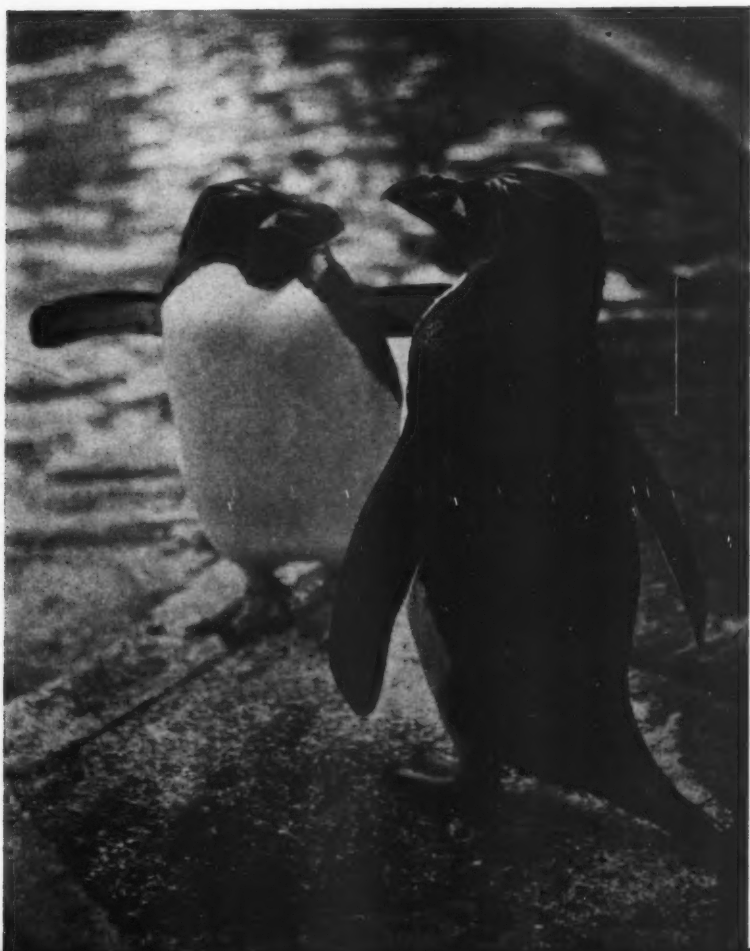
Linda Christian





ESTEN from MAGNUM

YLLA from RAPHO—GUILLUMETTE





DR. FRANKLIN COCHRAN

YLLA from RAPHO—GUILLUMETTE



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FLORENCE HOMOLKA



GLADYS RELYEA

SOMETIMES, in photography as in art, rules are proved by the exceptions. Gladys Relyea's cat, above, is centered in the composition to generate a feeling of serenity. But the Bronx cheers of the boys on the opposite page has an accidental connotation. One boy moved; the other did not, giving the finished print the overtones of a real and submerged personality. Try this sometime with a double exposure on the same person.

RAE RUSSEL



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ANDRE DE DIENES



BRASSAI from RAPHO—GUILLUMETTE



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BRASSAI from RAPHO—GUILLUMETTE

One thousand and one prints

from one negative

DURING the war, while conducting sensitometric research work for the Government, I was forever going to the mat with a villain of many pseudonyms. You may have heard him called the *Mackie Line*, the *Kostinsky Effect*, the *Eberhard Effect*, or, perhaps by the equally austere title of the "*Adjacency Effect*."

Whatever he is called, he is a by-product of development—a reaction produced by bromine, quinone, and other soluble chemicals that have a retarding action on development. Old man Adjacency Effect delights in "shrinking" or otherwise distorting images. Given a crack at two or more closely adjacent images he can, under favorable conditions, cause a retardation of silver formation so that the areas appear more widely separated than is actually the case. This, of course, plays hob if it occurs in astronomical measurements or in similarly delicate work. But as if changing the size of images isn't enough, he can also effect the development of the various densities of a negative.

Although not at liberty to divulge the nature of our war time experiments, I can say that the adjacency effects were a great hinderance in the type of work in which we were engaged. Our job was to try to eliminate it and as a result of by-

product experiments along this line, we found ways, in which the amount and kind of shrinkage could be controlled for predetermined results.

This article is about the *controlled shrinkage* of negative images. The object, in a nutshell, is to obtain an infinite number of aesthetically different pictures based upon what originally amounted to a single ordinary negative.

Supposing you were to contact print an ordinary negative onto a sheet of unexposed film. When developed, the image on the film would look like a regular print on paper except that it would be transparent when held to the light. This, then, would be a "positive" transparency. If, in turn, the positive transparency were printed onto another sheet of film, you



TEXT AND PHOTOS
BY JIMMY BROWN



ABOVE. This is a "straight" enlargement from the original negative. All the rest of the pictures on the next 4 pages were made from positive and negative transparencies (and combinations thereof) which were contact printed in progressive sequence—first from the original negative, then from one another. Opposite: A negative print made from the first positive transparency. (See Step 2a in the processing worksheet, next page.) Most of the hair detail and halftones in the face are already vanishing.

PROCESSING MADELINE SMITH NEGATIVE (PICTURE: "MADELINE")

Step No.	Combination	Film or Paper	Developer	Exposure	Processing	Effects
1	Orig. neg.	Portrait Panchromatic	D-72		Selected from file	
1a	Orig. neg.	Velour Blk. #3	Edwal 111 5-1 Solution			Full scale print enlargement all halftones represented.
2	Pos. trans.	Reproolith	Ansco #79 2 min.	5 sec.	1st pos. transp. contact printed. Printing lights adjusted for correct exposure.	Most halftones lost except in heavier parts of negative like the face section.
2a	Neg. print	Convira #3	Edwal 111 4-1	5 sec.	Neg. print light is adjusted each time to paper or film as needed.	Very little detail left in hair; most halftones lost in face.
3	Neg. trans.	Reproolith	Ansco #79 1½ min.	3 sec.	2nd pos. transp. exposed by contact from Step 2 (first pos. transp.) less exposure and develop. to obtain maximum shrinkage with less steps.	All halftones are now lost in this transp. with some shrinkage of neg. size. This can be carried on back and forth several times to get more shrinkage.
3a	Pos.	Convira #4	Edwal 111	10 sec.	Contrast positive	Extreme con-



would obtain a duplicate of your original negative, or a "negative" transparency.

If you were to bind the original negative and the positive transparency together so that they were slightly out of register, a print from this combination would, of course, be a positive-negative print. A bas-relief.

Now, then, supposing that after making the first positive transparency from the negative you were to chemically shrink the images in the positive transparency. If you were then to make a negative transparency from the positive transparency and then shrink the images in this in turn, you would find upon printing these two transparencies in register that a space (caused by the shrinkage) would exist between the two images and produce a photographic outline of the composite image. Very likely this line would have much the same characteristics of the dark line that is obtained through solarization. (See *Solarization Simplified*, Sept., '48, MINICAM, Ed.) But if you continue to make alternate positive

and negative transparencies, shrinking the images each time, you would soon amass a stock of transparencies that could be printed in combination with results far different than those obtained by other popular methods.

Before we get into the actual mechanics of the shrinkage process, I want to point out that my hundreds of experiments amount to little more than surface scratchings into the potentialities of this process. At one time I thought I had discovered something new; later I found articles buried in the archives of a scientific library that described somewhat similar work performed by photo engravers in the 1880's. To the best of my knowledge, however, no one has experimented with the aesthetic possibilities—to say nothing of the advertising and commercial possibilities—since the turn of the century.

The Kind Of Film To Use

Your original negative—the negative that forms the basis for all your experiments—can be made on whatever type of

A CAREFUL record of each step performed will enable you to duplicate any picture at will later on. Reproduced on the opposite page is a portion of Brown's records on processing the accompanying pictures. Space does not permit each intervening step to be illustrated. The picture at

the far left was made from the second negative transparency. Step number 4 produced the picture next to it. On this page, the left hand picture came from a combination of the transparencies produced in steps 2 and 5. The right hand picture is from the 6th transparency.



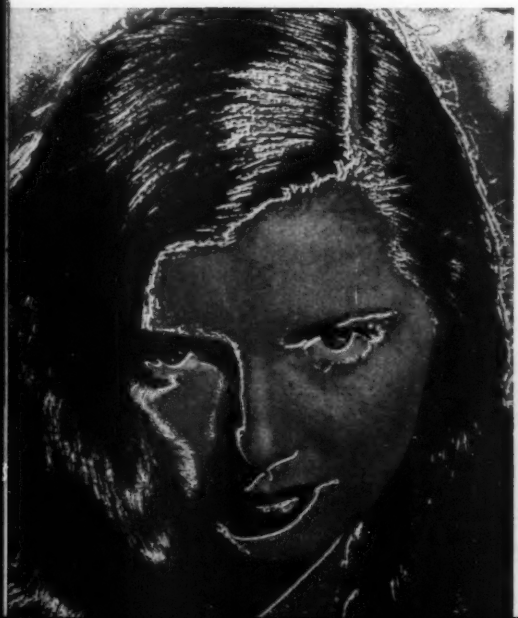
DIFFERENT combinations of transparencies produce unpredictable results. Practically all detail has been eliminated in the picture below by combining transparencies from steps 4 and 5. A transparency from this combination, however, when printed with the original negative, produces the odd effect in the picture at the lower left. Combined with a different transparency, it produces the scratch-board-like picture at lower right.

Abbott



film you prefer to use. I generally use panchromatic sheet film in making my first negative but it is purely a matter of choice. Orthochromatic sheet film would do just as well.

After the first or original negative has been made, however, a special type of film is required in making the positive and negative transparencies. This is a high contrast film commonly used by engravers. It is manufactured by most of the large film companies under such trade names as *Ansco's Reprolith*, *Du Pont's Photolith*, *Eastman's Kodalith*, *Hammer Offset*, *Cramer's Dry Plate*, *Cracolith*





NO ONE has, as yet, more than touched upon the commercial possibilities inherent in this process. At the far left is a "straight" print of an advertising label. The rest of these illustrations represent but a few of dozens of different designs made by combining positive-negative transparencies originating from a single "straight" negative.



Plate, etc. Your local dealer may have this film in stock in sizes ranging up to 8"x10" sheets. If not, the following are a few photo supply stores spaced across the country that can supply you with high contrast film:

Medo Photo Supply Corp.
15 W. 47th Street,
New York, N. Y.

K. Schlanger
333 W. Van Buren St.,
Chicago 7, Ill.

California Ink Co.
156 West 1st South St.,
Salt Lake City, Utah.

California Ink Co.
1136 Maple Ave.,
Los Angeles, Calif.

The approximate price of this film is about \$6.70 per box of 24 sheets which are 8x10" in size. Since one can rarely buy this type of film in any size smaller than 8"x10", I cut it on a trimming board to the size I need. For the 4x5" sheets, I make 2 cuts on an 8x10" sheet which furnishes four 4x5" sheets with no waste. For a 5x7" size, one cut from an 8x10" sheet furnishes two 5x8" sheets plus a little waste. The 1x5" waste strip can be used for testing. If the original nega-



LEFT. The reason there is practically no end to the different results that can be obtained is simple: there is no end to the "combinations" that can be used. This print made use of a transparency from Step 1, another from Step 6, and a third transparency from Step 7.

tive is smaller than $2\frac{3}{4} \times 3\frac{1}{4}$ ", I suggest enlarging the negative to at least the 4×5 " size so that it is easier to handle. With the subsequent registering of the many combinations of transparencies the larger size is far more adaptable.

If the film you buy is the colorblind type, you can handle it in the darkroom for reasonable lengths of time under a yellow safelight such as an Ansco A5. If you purchase an orthochromatic type of film, use a bright red safelight such as the Ansco A. The Carton the film comes in, or a packaging slip inside the carton, will tell you which type you have in case you are in doubt.

In making the actual transparencies (diapositives, as they are sometimes called), I find that it is easiest to resort to contact printing. In making the first transparency, the original negative and a sheet of unexposed contrast film are simply placed emulsion to emulsion the same as thought you were contact-printing a negative on paper. The light in the printer (if you are using a regular printing box) is cut down so that the length of exposure will be 5, 10, or 15 seconds to meet a developing time of 2 minutes. If you do not use a regular printing-box, you can subdue the light from whatever illumination source you use with sheets of spun glass or tissue paper. The main thing is not to cut your exposure time too short, because the extreme contrast of your copying film will cause blemishes from dust or lint to show up much more than they would on ordinary emulsions. Longer exposures help eliminate this danger—but overly long exposures will kill the shrinkage effect. For this reason, experiment with your light source until you are able to expose and develop your transparencies pretty much within the time limits outlined above.

Processing The Transparencies

By using either a red or yellow safelight, according to the type of contrast film you have exposed, you can watch the progress of your transparency during development. Although there are several developing for-

mulas available, those with which I am most familiar are: the Ansco Paraformaldehyde Developer, and an alternate developer, called Ansco 81. The latter works as well as the former for me and has the advantage of longer keeping quality. These formulas come in package form made up by the manufacturer, or can be mixed at home as follows:

ANSCO 79 PARAFORMALDEHYDE DEVELOPER

Water	64 ounces
Ansco Sodium Sulfite, anhydrous	4 ounces
Paraformaldehyde	1 ounce
Ansco Potassium Metabisulfite	$\frac{1}{4}$ oz. 45 gr.
Ansco Boric Acid Crystals	1 ounce
Ansco Hydroquinone	3 ounces
Ansco Potassium Bromide	.88 grains
Water to make	1 gallon
Dissolve chemicals in the order given and use solution full strength.	

ANSCO 81 REPROLITH DEVELOPER

Water	3 quarts
Ansco Hydroquinone	$4\frac{3}{4}$ ounces
Ansco Sodium Sulfite, anhydrous	$7\frac{1}{4}$ oz. 50 gr.
Ansco Sodium Carbonate, monohydrated	10 $\frac{1}{2}$ ounces
Ansco Citric Acid	$\frac{1}{2}$ oz. 100 gr.
Ansco Potassium Bromide	$\frac{1}{4}$ oz. 40 gr.
Water to make	1 gallon
Dissolve chemicals in the order given and use solution full strength.	

DEVELOPMENT: Ansco 79 Paraformaldehyde Developer 2 to $2\frac{1}{2}$ min. at 68-70 F
 Ansco 81 Reprolith Developer 2 to 4 minutes at 68-70 F

FIXATION: Ansco 204 Acid Hardening Fixer or Ansco 203 Non-Hardening Fixer.

SAFELIGHT: Ansco A-7 red safelight filter or equivalent, with a 10 to 2 -watt lamp.

As mentioned above, the exposure of the film should be regulated so that developing time runs about two minutes. The idea is to slightly over-expose and slightly under-develop the contrast film, for this is what gives us the shrinkage of the images. An odd characteristic of contrast film is the fact that an image, if correctly exposed, will remain latent for perhaps a minute during development. Then a very light image will begin to build up slowly until you begin to notice a darkening at the edges of the film which seems to flow across the film. From 30 to 60 seconds later the developing will be completed and the film is ready to be rinsed in a short-stop bath and placed in hypo.

Due to the thinness of contrast film emulsion, the fixing time in hypo need not exceed two or three minutes in a fresh bath. After this, five minutes of washing in running water is enough. If the film is then hung to dry before a fan it will be ready for printing in a quarter of an hour.

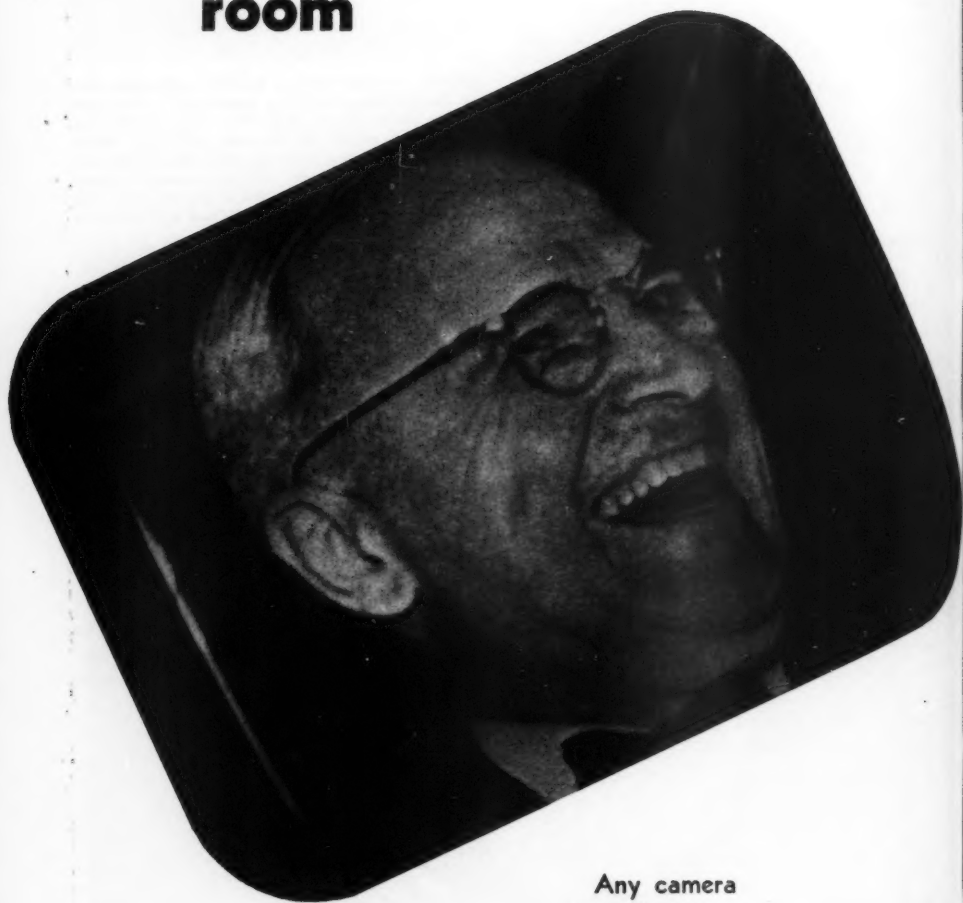
(Continued on page 121)



ABOVE, a straight print. Below, a print processed by the shrinkage method described in the text. Author Jimmy Brown thinks there are definite possibilities for use of the shrinkage process in advertising photography, but has never found the time to explore them himself. This is his only "process" experiment along fashion lines; anyone who likes, says he, is welcome to carry the ball on from here.



celebrities in your living room



Any camera
will get
television
pictures . . .
Here's how

TEXT: MERWIN DEMBLING
PHOTOS: SY FRIEDMAN

WANT to click your shutter on the great, the near-great, or the merely famous? Want to make your own pictures of important events from near and far?

Then set your camera on a tripod in front of the family television set and do it. Actually it's as easy as all that, once a few simple do's and don'ts are mastered. And these do's and don'ts come from a man who knows television photography from A to Z. He's Sy Friedman, photographer for NBC Television, who makes dozens of pictures of the television screen every day, for use in publicity and technical research.

In order to see the reasons behind what you will and what you won't be able to do, it's a good idea to understand something about how television works before you shoot. Naturally the subject is pretty complicated from the point of view of a radio engineer—but all the amateur photographer has to know about it can be summed up in a nutshell.

First of all, the television picture is not a solid, flat picture like a print. It is composed of hundreds of tiny horizontal lines of light—525, to be exact—but these lines of light are not all glowing at the same time. As the image is "scanned" at the transmitter, that is, as the scene is picked up at the station, it is broken up into horizontal lines of varying light intensities. The breaking-up process is accomplished by first scanning every other line going down once, and then the ones that were missed are picked out on a second time down. This really consumes less time than it takes to tell, for the entire scanning process is completed in $1/30$ of a second.

Now that we know that it takes $1/30$ of a second for the television apparatus itself to cover a scene, the reason for the first "don't" will be easy to figure out: *don't* use a shutter speed faster than $1/25$ of a second. If you do you'll get part of your scene well illuminated and part of it black—because the scanner just hadn't

finished its work when you made your picture.

A second don't concerns shutters: *don't* use a Leica, a Contax, a Graflex, or any other camera with a focal-plane shutter for making pictures of the television screen. Since the focal-plane shutter works by "wiping" a slit of light across the film, the chance of having the shutter's motion and the movement of the scanner perfectly synchronized is practically nil. The result will be uneven exposure and unsatisfactory pictures. A between-the-lens shutter—the kind most cameras are equipped with—takes in the entire scene at once, and with a sufficiently slow speed there won't be any scanning difficulties.

Down at the slow shutter speeds there may be exposure difficulties, however. A good rule about exposure in shooting television pictures is not to depend too heavily on your exposure meter. This is one of the few situations in photography where rule of thumb seems to work out better than careful measurement—perhaps there are some things we don't yet know about how light from a television tube acts on film. Sometimes meter readings will be 100% accurate, yet other times they might be 100% haywire.

GRIN and all, the photo of President Truman on opposite page is just about as good as television pictures can be, at least for the present. Notice how close-ups like this one preserve detail, while more distant subjects like the girl below lose it.





TOSCANINI (below) conducts a pianissimo moment in Beethoven's Ninth Symphony against a choral background. The montage was made in the control room of the television studios and provides good subject material for a would-be TV photographer. Pretty violent action (above) can be frozen at 1/25 second, the basic television exposure, if you shoot at the right instant. Although you can't see the glint in Charlie's eye (opposite), this is an example of a good television picture. Until the engineers develop 1000 line scanning, all telepix are going to look a little fuzzy. The all-over grey tones of television prints for once can't be blamed on the photographer either, since that's the way television looks and photographs at its best.



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Now that the don'ts are out of the way, the rest is easy sailing. The do's are much less complicated.

There is a way of adjusting the television receiver for best results in photography. The best image to photograph is a bright, *low-contrast* one. Even with the contrast knob turned all the way down, the television picture will seem harsh by print-quality standards, but that's something to be worked out by the radio engineers. Maybe someday in the future the television image will look like a salon print, but it's not very likely that that day will be tomorrow. For the present, then, adjust the receiver as bright as possible and keep contrast down, though not to the point where detail is lost.

In adjusting for brightness there is a point where white lines will appear across

the image. These are called "return lines," and indicate that brightness is up too high. They'll disappear if the brightness knob is turned down a hair. Watch for the return lines, though—that's just above the point where the receiver is turned for best picture taking.

Making pictures of the television screen is essentially a copying job, and, like all copy work, requires careful framing. If you're using a camera that has a ground glass back, along with ample bellows extension, focusing and framing are a cinch. If your camera isn't of this type, though, you may have to place it several feet back from the television screen for critical focusing and sacrifice a lot of image size while you're about it. In this case, try a portrait lens, which will allow you to work as close as ten inches to the screen.

Focusing with these lenses is done with a ruler and the instructions furnished—framing is at first a matter of b'guess and b'gosh, but a few trials will show you where to aim the camera for best results.

The basic exposure for shooting the television image at top brightness is F:4.5 at 1/25 using Super XX or fast type-B pan film. (This is what you've been waiting for, so go to it.) Since 1/25 is the fastest usable shutter speed, it isn't even necessary to have a fancy camera to make television shots. The average box camera has a shutter speed of about 1/20 of a second.

Naturally, better equipment will, up to a point, result in better pictures, or at least easier picture making. If, for example, your lens is faster than F:4.5—say F:3.5 or F:2—you can close the diaphragm to F:4.5 and feel safe in expecting good definition over the entire image. With box camera lenses and lenses rated at F:4.5 it's a good idea to settle for a smaller image and let the outer edges of the field go. All box camera lenses, and a good many of those on more expensive cameras, fall off in definition at the borders of the field. Since television may distort the image a little anyhow, and the surface of the viewing tube is curved, that would make three places where distortion might creep in. The photographer can

do nothing about the distortion that's in television itself, but he should try not to distort the image any more.

In processing television pictures the effect to be aimed at is low contrast. The transmission itself ups contrast to a point where a good deal of the time the resulting scene is half-and-half blank whites and solid blacks, but occasionally the use of a soft developer for both paper and negatives will improve the scene. So far, the best pictures of television images have an all-over grey tone. Ordinarily this wouldn't be too desirable, but it's better than the harsh contrast of the viewer.

Since 1/25 is a slow speed for stopping motion, the picture you choose to shoot should be at a pause in the action; one that you might expect to stop at 1/25 if you were shooting the scene normally. By and large, close-ups work out better in television than long shots. The effect is exactly the same as the coarse halftone screen used in newspaper illustrations: where there's a lot of tiny detail a good deal of it is lost. In a screen-filling shot of a face, on the other hand, there is enough large detail for a recognizable image.

There is no very good way to make a television picture look as though it weren't made from television. Using rough surface paper helps do away with a good deal of the grain and scanning lines, but what's the use of making television pictures if they're going to look like just ordinary photos? NBC prints them on glossy paper, ferrotyped. There's no chance of not recognizing them as television, but on publicity pictures NBC goes even further. They use a mask with rounded corners to reproduce the outline of the viewer.

It is not hard to photograph the television screen. If the pictures are not grade-A even though all the rules have been followed, there's more than a good chance that the fault is not with the photographer but with television itself. A truck passing by outside the house might cause interference that will ruin a

(Continued on page 126)



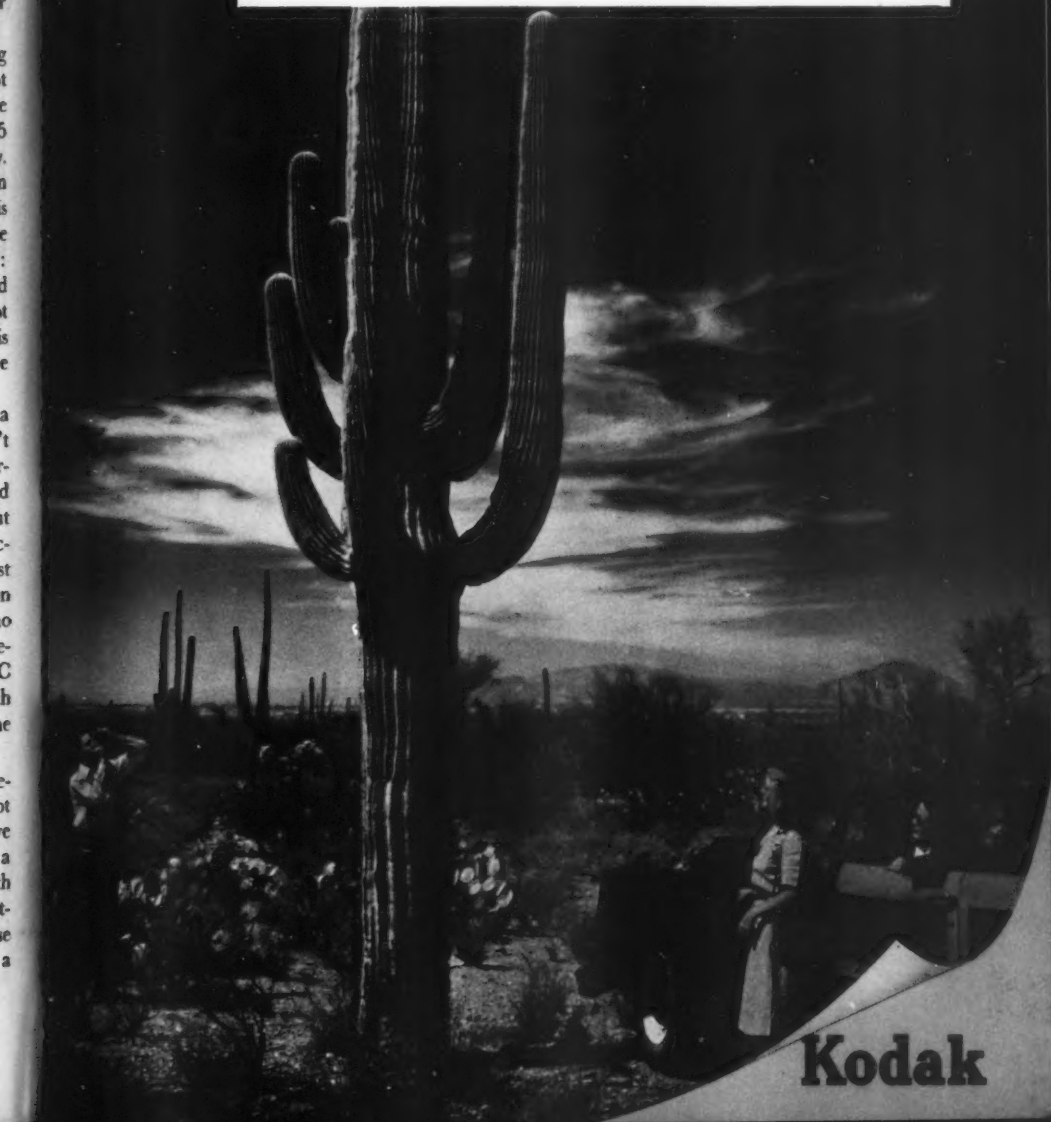
SHOOTING TELEVISION is all in a day's work to Sy Friedman, photographer for NBC Television. Here he is ready for picture-making, with his Speed Graphic and tripod before a studio television screen. Photo by Art Selby, Courtesy NBC.

Your trips are more richly rewarding, more pleasantly recalled, when you "bring them back" in color. Color captures the feel, the warmth, the very atmosphere of those happy days. And even if you're a confirmed stay-at-home, color offers new scope to your photographic skill, an entirely new outlet for your artistry, endless

new thrills of accomplishment.

There's a Kodak color film, you know, for every type of camera: Kodachrome Film for most miniature, sheet-film, and home-movie cameras . . . Kodacolor Film for most roll-film cameras . . . Kodak Ektachrome Film for processing in your own darkroom.

It's Kodak for Color



Kodak

BULLETINS

NEWS OF KODAK PLANS AND PRODUCTS

New Paddle—Some of the odd-looking gadgets turn out to be the most useful. The new Kodak Stirring Paddle pictured below, for example. Both ends have utility. The curved spatulate tip is well suited to shifting and separating prints in the tray, and for stirring chemical solutions; the center opening increases the stirring efficiency and aids draining. The opposite end is flared and flattened; the flaring helps

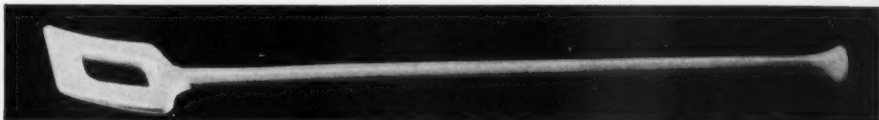
to keep it from slipping into the print tray, and the flat tip is useful for crushing lumps when chemicals are being mixed. Paddle is made of sturdy yellow Tenite; the price, 35 cents.

Deep Trays—Sooner or later, every darkroom worker feels the need of one really big, deep tray—such as a Kodak Rubber Deep Tray. There are two tray sizes—16x20 inches and 20x24 inches

—each 6 inches deep. They're made of fine hard rubber, generously thick-walled, designed to last for many years of constant use. The prices: 16x20, \$14.75; 20x24, \$19.60.

See your Kodak dealer

KODAK products are sold through Kodak dealers, any of whom will be glad to complete the descriptions of Kodak products which are mentioned in these pages. And in matters of general photographic information your Kodak dealer will be found to be soundly informed.



TWO ESSENTIALS: GOOD LIGHT, AND A FIRM CAMERA SUPPORT

MANY factors enter into each good picture, but two are indispensable—good light, and a steady camera.

For an ideal combination of power, flexibility, low cost, and foldaway compactness, choose the Kodaflector (below) as your lighting unit. It extends from 2 feet 10 inches up to 6 feet 4; accepts No. 1 photofloods, and can be adapted to No. 2 photofloods; is sturdy but light.

For true camera steadiness—plus flexibility in aiming—rely on the Kodak Eye-Level Tripod and the Kodak Turn-Tilt Head (shown here with a Kodak Tourist



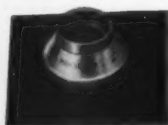
f/4.5 Camera). Tripod extends to 60 inches, closes down to 22½, weighs only two pounds. Head panoramas 360 degrees horizontally, and from straight up to straight down, locking firmly in any position.

And for steadiness and flexible operation of movie cameras and the heavier still cameras, look to the Cine-Kodak Tripod (at right).



Prices: Kodaflector, \$8; Kodak Eye-Level Tripod, \$20 plus tax; Kodak Turn-Tilt Head, \$13.25 plus tax; Cine-Kodak Tripod, \$60 plus tax.

AN ENLARGEMENT IS ONLY AS GOOD AS THE ENLARGING LENS



2-inch f/4.5



3-inch f/4.5



4-inch f/4.5

Kodak Enlarging Ektar Lenses (above) are ideal for color work; Kodak Enlarging Ektanon Lenses (at right and below) for black-and-white enlarging.



2-inch f/4.5



3-inch f/4.5



4-inch f/4.5



5 1/2-inch f/4.5



6 3/4-inch f/4.5

KODAK Enlarging Ektar Lenses (top row, left) are natural choices for the discriminating worker.

Kodak Enlarging Ektanon Lenses (second and third rows) are high-quality lenses designed particularly for black-and-white enlarging.

All these lenses are multi-element, unit focusing, and *Lumenized*—hard-coated on all glass-air surfaces. This coating reduces internal reflections, and leads to cleaner tonal separation in the prints, without veiling or degradation of highlight detail.

More important still, these are not mere adaptations of camera lenses. Kodak enlarging lenses are specifically designed for the conditions that prevail in enlarging—where an image must be conveyed from a flat-surfaced negative to a flat-surfaced paper, at relatively short range, with uniform definition over the entire field. This is their job, and they do it extremely well.

KODAK RETINA CAMERAS I AND II, ABSENT SINCE 1940, RETURN TO THE U.S. MARKET

LONG MISSING, the popular, able Kodak Retina I Camera (below) and the Kodak Retina II Camera (at right) are again arriving in the United States in limited quantities.

Imports of these fine 35mm. miniature cameras halted soon after the outbreak of war in Europe. Their general design, beautiful finish, compactness, and watch-like workmanship are

already familiar to American miniature-camera enthusiasts.

The Kodak Retina I Camera weighs 16 ounces; has a 50mm. Schneider Xenar f/3.5 Lens in a Compur Rapid Shutter with nine speeds (1 second to 1/500) and "bulb"; body shutter release and release on the shutter housing; optical eye-level finder; automatic exposure counter; double-exposure prevention mechanism, and depth-of-field scale. Its body is a sturdy die casting, with exposed metal parts satined. The price, \$62.50 plus tax.

The Kodak Retina II Camera ranks as the finest of folding-type miniature cameras. Its lens is a 50mm. Schneider Xenon f/2, fitted to a Compur Rapid Shutter (1 second to 1/500, and "bulb"). View finder is combined with a range finder of the superimposed-image type, coupled to the focusing movement. Like its sister camera, it has double-exposure



prevention, exposure counter, and releases on both body and shutter. The price is \$170 plus tax.

Excellent leather field cases are available for both the Kodak Retina I and Retina II Cameras. Case for the Retina I is priced at \$9.50; for the Retina II, \$12.50. Kodak Combination Lens Attachments can be employed with either Kodak Retina Camera.

Prices subject to change without notice.

Kodak

He's making a rainbow behave

At your Kodak dealer's —

Kodak Tri-Chem Pack

All the chemicals for an evening's developing or printing, packed in a handy 20-cent carton: KODAK UNIVERSAL M-Q DEVELOPER, KODAK UNIVERSAL STOP BATH WITH INDICATOR, KODAK UNIVERSAL FIXER.

Price subject to change without notice

Kodak Developer Packets

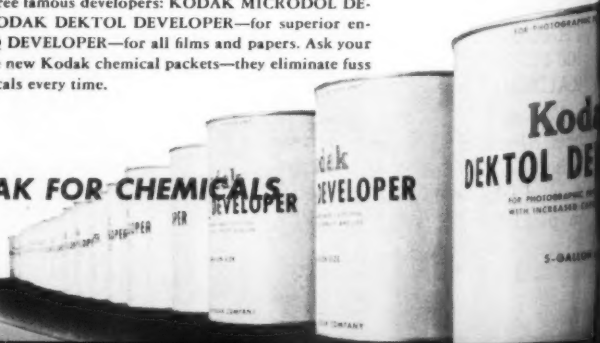
Also in convenient foil packets, these three famous developers: KODAK MICRODOL DEVELOPER—for fine-grain negatives; KODAK DEKTOL DEVELOPER—for superior enlargements; KODAK UNIVERSAL M-Q DEVELOPER—for all films and papers. Ask your dealer for free booklet describing all the new Kodak chemical packets—they eliminate fuss of storage... permit use of fresh chemicals every time.

...with test tube and test strip, he's studying the absorption characteristics of dyes... learning how to control their effects on film and paper... helping you to make better color pictures... with better-than-ever preparations for your darkroom. A special division of Kodak's famous research laboratories is devoted to this continuing improvement of photographic chemicals... for both color and black-and-white use... Eastman Kodak Company, Rochester 4, N. Y.

"KODAK" IS A TRADE-MARK

IT'S KODAK FOR CHEMICALS

Kodak



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"THE PARADE" by Barney Cowherd from The Museum of Modern Art's current photographic show, "The Exact Instant".

WHAT MAKES A NEWS PICTURE?

WHAT KIND of pictures do newspaper photographers take? That's in about the same category with the question, "what kind of fires do firemen put out?"

The newspaper photographer covers what he is assigned to shoot, and by the definition of his trade, it usually deals with news: accidents, sports, celebrities, and X marks the spot: TOT, 5, SLIPS THROUGH BRIDGE PLANK, FALLS 108 FEET TO RIVER; or LOVE NEST RAIDED, PAIR HELD.

You might say that the news photographer, in addition to snapping what the city editor assigns him, does a job up to the level of what the city editor believes is OK in pictures. More often than not, there

is time only to flash a shot at a pre-set F:8 at 1/100 of a sec. from 8 feet, and get it back *fast*. The city editor accepts a news shot that is unfuzzy and safely deposited on the engraver's big shooting camera ahead of schedule as good photography, and basks in the photographer's good will when that gentleman takes some Sunday shots of "the city towers as seen from the Park"; or "buried in the snow, automobiles were lined up for blocks like so many white bumps."

The people who read newspapers are ahead of the taste that the city editors wish on their photographers as shown by public interest in any public display of good pictures. But as long as the news

photographers have their economic standards set by "is it sharp," and "did you get it back in an hour," and not much else, they are going to fill that bill, and little more, until they are pushed. In the same way, American magazine photographers did no more than their assignment editors demanded for the year up to 1937; and then suddenly the same photographers became far better photographers because they were pushed by assignment editors, whose own standards were set up a notch by the appearance of *Life* magazine. Photographers responded immediately once they got a chance to work with editors who themselves knew photography. Their improvement appeared mostly in the major magazines, and in a dozen large dailies.

Save for metropolitan centers, where getting a picture back to "the desk" fast is not considered a feat in itself because so many people can do it well, news photos stayed in their own ways, as stylized as any salon. The 11x14 print of smooth petaled daisies against a black background, or the harvest scene with a burnished moon, or V-shaped birches set deeply in the snow gave way in news photos to ESCAPES DEATH, FAMILY BURNS; or JONES SLIDING HOME WITH THE WINNING RUN AS TIGERS WIN TENTH STRAIGHT. Only a few men of either group applied the viewpoint changes to their work that magazine photographers, egged on by Wilson Hicks of *Life*, showed in theirs. Among news photographers, efforts at change or more penetrating photographs brought a stony look from the editor. Where classified ads sold for a dime a line, and down, the change was hardly perceptible.

The current show at the Museum of Modern Art of news pictures ("The Exact Instant," February 9 to May 1) for the past 70 years reveals the neck ring that city editors' knowledge of pictures have on their photographers. Imagination, comment, wit, originality are hard to find.

(Continued on page 122)

"PEOPLE, 1948" by Barney Cowherd for the Louisville Courier-Journal ... a given moment in our history.





ACTION

WINNERS IN 1948 GRAFLEX CONTEST TRY SOME NEW

THE FIRST JUDGING of any contest is done by the official judges. The second judging comes later when the picture editors of national magazines and newspapers print the pictures and names of the winners. It is interesting to see that rarely do these two sets of judges have the same ideas about winners.

From the unusually fine collection of prize winners in the 1948 Graflex Photo Contest, the editors of *Minicam* have selected the pictures reproduced on the following pages. The official judges for this year's contest, and who had a hand in dishing out the \$5000 among 62 prize winners were T. J. Maloney and Ed Hannegan of *U.S. Camera*; Norton Wood, *This Week*; and William Eckenberg, National Press Photographers Association, who judged the action class; Bruce Downes, *Collier's*, Barbara Greene and A. A. Bodine, photographers, who judged the feature class. In the color class, the judging was done by Anton Bruehl, commercial color illustrator, Ivan Dmitri, photo journalist and Larry Keighley, *Saturday Evening Post* photographer.

The judges comments on the various classes give the tip-off for photographers who want to enter next year's contest. The color class was given faint praise inasmuch as it "attracted considerably more entries than last year." Giving more specific criticisms, the judges said, "the contestants had merely wasted film. They had shot indiscriminately, without giving a thought to either composition or lighting."

The non-professionals came up with "a



"NAVAJO STYLE" by John G. Malmin of the Los Angeles Times was a stand-out in the Professional Feature Class. It won an Honor Award.

with a graflex

FIELDS

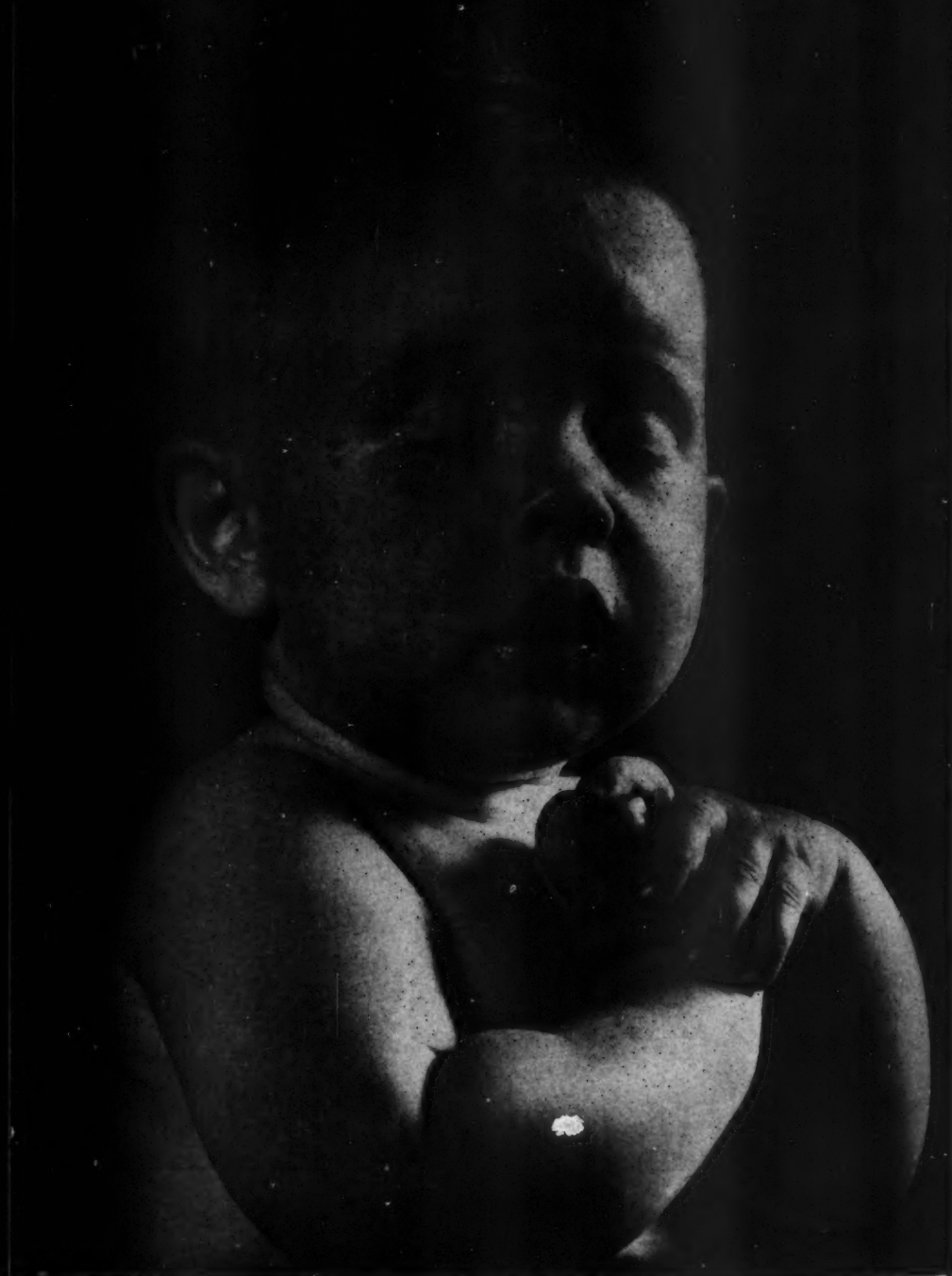




THE
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"THE BAND IS COMING" (left) by M. E. Warren of Annapolis, Maryland was an Honor Award winner in the Professional Feature Class. "QUIT'N TIME" (below) was made with the combination of a speedlight and a Speed Graphic. It was another Honor Award Winner, in the Professional Class.





"OH, MY DEAH" by Constance Bannister of New York won Second Prize in the Professional Feature Class. It was originally a part of one of Miss Bannister's "Baby Banter's", a photographic cartoon strip that she syndicates in newspapers throughout the country. (See Minicam, Dec., 1948)

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lot of cats, but few ideas". Commenting on the subject matter one judge said, "about one out of every four pictures contained a cat". Apparently the non-professional action class entries were short on action, for "the salon influence hung too heavily over this class. There were too many attempts to make pretty pictures whether or not the subject called for it. Through lack of experience, too many amateurs work by rules rather than by emotion. This was the easiest class to judge because of the absence of close competition."

In the professional action class, the judges had the hardest job for there were a variety of dissimilar subjects presenting unusual photographic problems. Hals-

man's "Dali Atomicus", by now well-known to American readers through the space given to it in *Life*, combines cats, Dali, flying water and chairs in a noisy photographic pantomime.

For the Teen-Age Feature and Action classes the judges had nothing but good words. Said one, "If these are the photographers of the future, it looks like the field is in good hands . . . the teen-ager saw picture possibilities in such simple subjects—an old bell hanging from a wall, a corner of a greenhouse and woodland scenes." There were a large number of competent sports pictures which made another judge remark, "These youngsters aren't afraid to tackle anything—and will make good photographers because of it."

"SAILING AT SUNSET", a beautifully backlighted salon print, won an Honor Award for Gustav Anderson of Amityville, New York

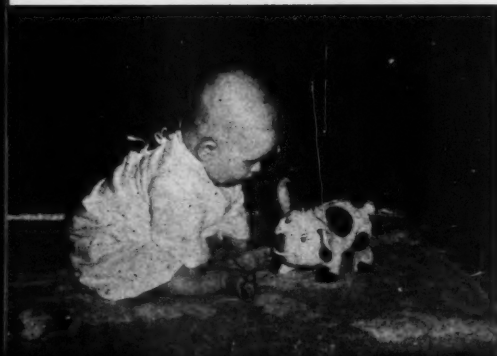




MOBILE background screen

BY LOUIS ELL

A PLAIN, contrasting background (above) centers all the picture-interest upon the baby. Without a background screen a confusing clutter of table-legs (below) steal part of the show from your subject. If you can get someone to maneuver a light, portable screen (bottom) while you concentrate upon getting the picture, so much the better.



CLOSEUPS and semi-closeups shot indoors, especially in crowded homes and apartments where no blank wall space is available, are frequently ruined by furniture, windows, or door frames cluttering up the background. In these instances, a mobile background can be of tremendous aid to every still or movie-making enthusiast.

The mobile background is merely a light wooden frame about 3x4 feet in size, upon which some neutral toned cloth has been stretched. A medium blue color is good for both black-and-white or color pictures. This background is slipped quickly into place behind the subject, and effectively masks off all distracting elements, permitting the center of interest to stand out sharply.

It is especially useful in photographing small children who are apt to be in continuous movement. The background handler merely keeps the gadget in line with subject and camera, and the photographer is free to concentrate on other matters.

Outdoors, the background is useful to isolate flowers, pets, etc., so they will photograph with improved clarity. Naturally, care must be taken to exclude the tops and ends of the background from

(Continued on page 129)

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Minicam

PHOTO DATA

CLIP SHEET FOR PERMANENT REFERENCE

Mix It From Stock

WITH ELEVEN easily made stock solutions and the chart on the following pages, you can mix at a moment's notice any of 34 commonly used film developers.

The method of working from stock solutions instead of prepared developers or dry chemicals has a number of advantages. It puts at your fingertips a wide selection of developers for a variety of purposes—a great many more developers than you'd care to keep around your darkroom already mixed. Since the ingredients are in the form of solutions, they're ready for instant use and are simple to measure out. Also the method allows you to keep all solutions in constant use, thus fresh solutions are always on hand.

HERE'S HOW it works. The table is based on cubic centimeters (cc) since it is a great deal easier to make the various conversions in the metric system than in our own.

The columns numbered 1 to 11 represent the stock solutions you will use. The composition and strength of each is noted in percentages at the top of the column. A 20% solution has 20 parts of chemical in every 100 parts of stock solution. Thus to make the 4% glycin-8% sodium sulfite solution, you should dissolve 8 grams of sodium sulfite in a little less than 100cc of water, add 4gm of glycin to the sulfite solution, then add enough cold water to bring the total volume to 100cc. The sulfite is necessary and must be put in solution first because glycin won't dissolve in water alone.

In making up the stock solutions, warm water at about 125° F. should be used for dissolving the dry chemicals. Because of the high concentration of the solutions, a few may crystallize in cold weather—they can be redissolved by placing the bottles in warm water.

After the stock solutions are ready, any of the developers shown on the chart may be made up by mixing the amounts of stock solutions indicated in that particular developer's row, and adding water to make one liter (1000cc). All quantities shown in the table are in cubic centimeters and are based on 1000cc as the total volume of developer. Any quantity of developer may be mixed, however, using proportionate amounts of stock solutions.

For ease and accuracy in measuring out small amounts of the solutions you will need a 10cc pipette. Besides the pipette you should also have two graduated—a small and a large—marked in cubic centimeters. A cylindrical type of 50 to 100cc is preferable for the small graduate. Both the grad-

uates and the pipette are available from any chemical or medical supply house.

In mixing certain of the developers, you'll notice a few of the chemicals are given in dry form, such as: 20gm dry. This means, add 20 grams of crystals to the developer mixture because it's impractical to concentrate this amount of chemical in the stock solution.

IF YOU HAVE a pet developer formula you'd like to add to the chart, it can be done very easily.

The heading for each chemical in the chart has a designation like 1gm/25cc. This means there is 1 gram of dry chemical for every 25cc of stock solution. So when converting for each chemical, just multiply the number of grams in the formula by the number of cc's shown in the heading. This gives the cubic centimeters of that stock solution required when mixing the developer. Of course, the formula used must be based on a total volume of one liter.

One formula is, for instance:

Metal	5gm
Sodium Sulfite	100gm
Glycin	5gm
Borax	10gm
Water to make	1 liter

In this case you would multiply 5gm of metal by 25, which gives 125cc of Solution No. 1. And 5gm of glycin times 25 is also 125cc of Solution No. 3. Don't forget, here, that the stock solutions of developing agents also have sulfite in them which must be subtracted from the amount of sodium sulfite called for by the formula. To do this, note that in two of the solutions (Nos. 1 and 2) the ratio of sulfite to developing agent is 1 to 1, and in the glycin solution (No. 3.) it is 1 part glycin to 2 of sulfite. Thus for the amount of dry metal or hydroquinone called for by the formula, you must subtract an equal amount of dry sulfite; for every gram of glycin you must subtract 2 gm sulfite. Pyro is handled in a similar fashion.

To go back to our example, the metal-sulfite solution contains as much sulfite as metal, in this case, 5gm. Likewise, the glycin-sulfite solution has twice as much sulfite as glycin, or 10gm. In mixing the above formula, then, 15gm of sulfite is already provided in the developing agent solutions. Of the original 100gm specified, therefore, 85 must be in the form of sulfite solution. Since 1gm/5cc appears at the head of the sulfite column (No. 5), we multiply 85 X 5, giving 425cc of Solution No. 5. And 10gm borax times 25 is 250cc of Solution No. 8.—By Bob Wolter.

**METOL
HYDROQUINONE
DEVELOPERS
(Continued)**

	1	2	3	4	5	6	7	8	9	10	11	1000
DEFENDER 4D DUPONT ND-2	62.5	75			348			125				1000
KODAK D 11 DEFENDER 9D	25	225			325	150					50	1000
KODAK D 19	55	220			425	280					50	1000
DK 50	62.5	62.5			125		100				5	1000
DK 50 Diluted 1:1	31	31			62.5		50				2.5	1000
DK 50R (Replenisher)	125	250			75		400					1000
DK 60a	62.5	62.5			225		200				5	1000
DK 60a TR (Replenisher)	125	250			170		400					1000
D 61 Diluted 1:1	38.7	74			202.5	35				21	8.5	1000
D 72	77.5	300			150	400					19	1000
D72 Diluted 1:1	38.8	150			75	200					9.5	1000
KODAK D 76 DEFENDER 6D	50	125			465			50				1000
KODAK D 76R DEFENDER 6DR	75	187			447			20 gm dry				1000
EDWAL 10	125		125		424			250				1000
GLYCIN TANK DEVELOPER			52.5		10	31						1000
EDWAL 126					125						8	1000
ANSCO 45 KODAK D 11 DEFENDER 1D				87.8	52.5	42.5				2.1	1.1	1000
ABC PYRO-SODA DEVELOPER				51.6	30.9	25				1.21	.65	1000
ABC with Carbonate reduced— for contrasty subjects.				87.8	52.5	14.2				2.1	1.1	1000
KODAK D 7 DEFENDER 2D	17			4	68.3	4				5.6	3.8	1000

Add 500 cc. (17 oz.) of water to dilute 1:2 for softer development.

Add 6 grams (93 grains) of Amidol in dry form.

Add 455 cc. (15.3 oz.) of water to dilute for tank developing 1:1:1:13. Use tray dilution for replenisher.

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- ★ Interchangeability of film receptacles, affording use of the many types of black and white as well as color film.
- ★ Revolving back for either up-and-down or sideways pictures, at the twist of a wrist, to fill your negative.
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Automatic diaphragm—mounted 190mm. Ektar f/5.6 coated lens for 4 x 5 and 152 mm. Ektar f/4.5

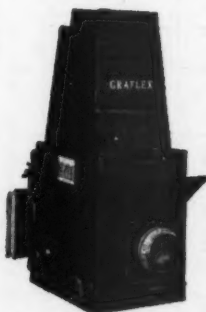
coated lens for 3½ x 4½; focal-plane shutter with speeds from 1/30 to 1/1000 sec. and Time; built-in synchronization; reflex focusing; revolving back. Accessories include case, interchangeable lenses, filters, film pack adapters, film holders, film magazines, lens shades, Graflex Flashing Unit, focusing panel, etc.

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SALONS AND EXHIBITS

★ FOLLOWS P. S. A. RECOMMENDED PRACTICES

Closing Date	Name of Salon	For Entry Blank, Write to	Number of Prints and Entry Fee		Dates Open to Public
Exhibit to see	First Annual International Students Photographic Art Salon.				Museum of Art, Santa Barbara, Calif., Apr. 2-10
Exhibit to see	★1949 Seattle Exhibition of Photography.				Art Museum, Seattle, Wash., Apr. 6-May 1
April 1	★2nd Annual Salon of Marine Photography.	Henry T. Sharp, Jr., 3 Sunset Road, Hilton Village, Va.	4	\$1.00	Mariner's Museum, Newport News, Va., Apr. 3-30
April 4	★Ninth Syracuse International Salon of Photography.	Miss Reby Francisco, Salon Secretary, 240 Kirk Ave., Syracuse, N. Y.	4 mono-chrome or color prints, or color transparencies	\$1.00 each section	Museum of Fine Arts, Syracuse, N. Y., Apr. 20-May 15
April 11	★8th Montreal International Salon of Photography.	William Sims, Salon Secretary, 810 Buchanan St., Ville St. Laurent, Montreal 9, P. Q. Canada.	4 mono-chrome and/or color prints	\$1.00	Museum of Fine Arts, Montreal, Canada, May 14-29
April 14	★Sixth New Zealand International Salon of Photography.	H. A. Larsen, Box 324, Hamilton, New Zealand	4 prints and/or slides in 4 sections	\$1.00 or \$1 for b. and w. or color division	Art Gallery, Hamilton, New Zealand and other cities, May 9-Aug. 30
April 16	★Second El Camino Real International Color Slide Exhibition.	George F. Brauer, Chairman, 1946½ Lovelace Ave., Los Angeles 7, Calif.	4 transparencies	\$1.00	6 California cities, May 2-8
April 25	★18th Annual Boston Salon of Photography.	Arthur Hammond, Salon Secretary, 353 Newbury St., Boston 15, Mass.	4	\$1.00	Boston Camera Club Galleries, 351A Newbury St., Boston, Mass., May 22-29
April 30	First Halifax International Salon of Photography and Color Slide Exhibition.	W. Ray Inor, 217 Agricola St., Halifax, Nova Scotia, Canada.	4 prints and/or color slides	\$1.00 each division	Lord Nelson Hotel, Halifax, Nova Scotia, Canada, May 25-27
May 12	★Third Annual Photographic Salon of San Diego County Fair.	Director of Photographic Salon, P. O. Box 578, Del Mar, Calif.	4 prints in 5 sections	\$1.00 each section	San Diego County Fair, Del Mar, Calif., June 24-July 4
May 15	★First New York International Color Slide Exhibition.	William D. Fuguet, Chairman, 1065 Lexington Ave., New York 21, N. Y.	4 color slides	\$1.00	Central High School of Needle Trades Auditorium, 225 W. 24th St., New York, N. Y., June 3 and 6
June 1	★Premier Salon International De Quebec.	Pauline Fiset, Secretary, 2090, Blvd. Laurier, Sillery, Quebec, Canada.	4	\$1.00	Quebec Provincial Museum, Sillery, Que., Canada, June 19-July 5
June 11	Nineteenth Midland Salon of Photography.	J. W. Steele, Salon Secretary, 84, Wellington Road, Birmingham 20, England.	4 prints and/or slides in 5 classes		Art Gallery, Shrewsbury, Shropshire, England, July 16-Aug. 13
June 15	★1st Hawaiian International Salon.	Frank Kroulik, Salon Chairman, 1354 Kapiolani Blvd., Honolulu, Hawaii.			
June 30	★First Hawaii International Color Slide Exhibit.	Wm. P. St. Clair, Jr., 1562 Pensacola St., Honolulu 25, Hawaii.	4 color slides	\$1.00	Academy of Arts, Honolulu, Hawaii, July 11-16

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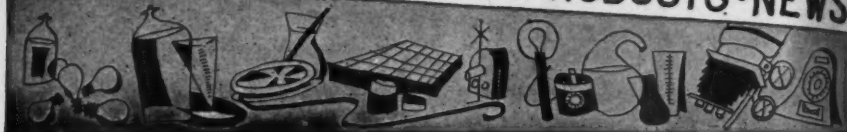
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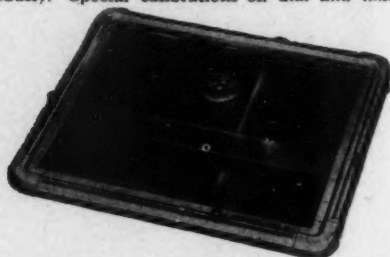
DUCTS·NEWS ABOUT NEW PRODUCTS·NEWS



Margin Setting Simplified

If you have trouble setting even print margins in the dark, the new Airequipt Dialmaster enlarging easel may interest you.

Designed for speed and convenience of operation, a single twist of its built-in dial sets both the top and left hand margins simultaneously. Special calibrations on dial and mask-



ing bands give direct reading of margin widths between $\frac{3}{16}$ " and $\frac{3}{4}$ " for any size paper up to 11"x14"— $\frac{3}{16}$ " borders are automatically set for 14"x17" paper. Other important features are self-aligning masking bands to assure square and accurate margins, two spring-loaded counterbalances that hold frame in "open" position; rubber stripping inlaid in base for skid prevention; all steel construction with reinforced base. Its price—\$16.00 plus Federal tax.

Airequipt Manufacturing Co., Inc.
New Rochelle, New York

New Film Pack Adapters

If you're having trouble getting 4x5 film packs, here are a couple of gadgets that may solve your problem and save you a little money on the side. They are all-metal reducing adapters that will fit your 4x5 film pack holder and permit you to use smaller and more readily



available film packs. The adapters are being made in two sizes: No. 1045 for 9x12cm ($3\frac{1}{2}$ "x4 $\frac{3}{4}$ ") film packs; No. 1034 to take $3\frac{1}{4}$ "x4 $\frac{3}{4}$ " packs. They are priced at \$1.12 each with the Federal tax.

Brumbarger Co., Inc.
34 74th Street
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Frisket for Photographers

When you have some local intensifying or reducing to do, or want to block out and protect part of a negative or print for any other reason, a jar of frisket is a handy thing to have around. A new-type all-purpose masking medium, called Liqua Frisk't, has been developed to make such jobs simple for even the inexperienced worker.

Liqua Frisk't is in the form of a transparent red liquid plastic. Brushed over the sections to be protected, it dries in ten minutes, then can be cut to an outline with a sharp frisket knife—without damage to print or negative—and the overlap peeled away. Chemically resistant, it is unaffected by water or photographic solutions and is elastic enough to stretch or shrink with the surface to which it's applied. The entire film of Liqua Frisk't strips off easily at any time without the use of solvents.

The frisket is available in several colors, including red, green and blue transparent, semi-opaque white, black, and clear transparent, on mail-order only. The cost is \$1.00 for an 8 oz jar, plus 25c packing and postage.

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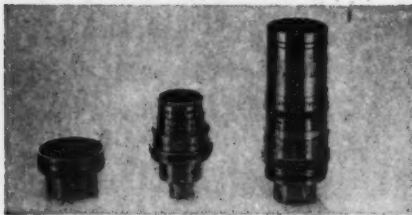
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New Lenses for Cine-Kodaks

If you're thinking of broadening the scope of your moviemaking with additional lenses, you may want to look into Elgeet's latest offering—a 7mm wide angle lens and a 3" telephoto lens, both coated, and designed especially for Eastman movie cameras.



The 7mm wide angle lens fits directly on the Kodak Model 90 8mm movie camera by means of a special adapter. Rated at F:2.5, it is a six element lens of high optical correction. The exceptionally short focal length of the lens gives it a large field, covering four times the area of a standard $\frac{1}{2}$ " lens. It sells for \$47.55 with the tax, which also includes a knurled filter ring accommodating standard 21.5mm filters.

The 3" F:2.9 telephoto lens is designed to fit directly on 16mm or 8mm Kodak Magazine Cameras and the 16mm Kodak Model "K" and Cine-Special. A feature of the lens, in addition to its high magnification power, is a common index line for the focusing and diaphragm scales which greatly simplifies operation. This index

line can also be turned to any of four positions for easy reading and setting. The lens will take a Series V filter under its hood, making additional filter mounts unnecessary. It sells for \$64.30, tax included.

The price on the Elgeet Interchangeable Lens adapter for Kodak Magazine Cameras, also illustrated, is \$6.95 including tax.

Elgeet Optical Company
Rochester, New York

For Fedco Tank Owners

Users of Fedco Roll Film Tanks should be glad to hear of a new policy recently introduced by the manufacturer which will permit replacement of broken tank parts—such as cover, reel or reel container. Instead of having a useless tank lying around on a darkroom shelf, broken parts can now be returned, together with 50¢ in coin for each replacement, and new parts will be sent out immediately. So save the pieces and mail them to

Fedco Products
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Mix As You Go

To the photographer who does darkroom work only occasionally, Kodak's new Packet Chemicals offer an easy answer to processing solution worries. Factory fresh chemicals, factory mixed, ready to dissolve in water and use at a moment's notice—in just the right quantities for an evening's work—that's the story on these handy foil-packaged chemicals. They're



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heat-sealed in laminated aluminum foil and Kodapak sheet packages and will keep indefinitely. There are no storage problems either when you use Packet Chemicals, as you mix only what you need and throw it away when you're finished. What's more, Packet Chemicals are economical to use, says Kodak.

So far, the following Eastman formulas are available in packet form: Microdol, Dektol, M-Q Developer, Universal Stop Bath, Sepia Toner, Blue Toner, Farmer's Reducer, Chromium Intensifier, Reducer and Stain Remover, and a complete darkroom chemical outfit, called Tri-Chem Pack, with packets of M-Q Developer, stop bath, and fixer all in one convenient package. See your dealer for prices.

Eastman Kodak Company
Rochester, New York

Projection Data

For movie and slide enthusiasts who like to have all the facts at their fingertips, the makers of Radiant Projection Screens announce a new version of their handy Screen Finder. In the form of a slide rule, the Radiant Screen Finder quickly answers such projection problems as what screen size to use, how far from projector to screen, what focal length lens, and gives other useful information for all types of film projection. It costs 25c and is available from your photo dealer, or write to . . .

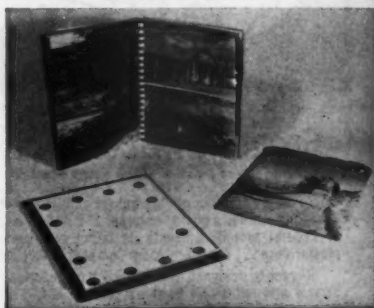
Radiant Manufacturing Corp.
2627 Roosevelt Road
Chicago, Illinois

Tripods and Telephotos

Next time you plan to use a telephoto lens, don't forget and leave your tripod at home. When you're shooting with a telephoto, camera movement is magnified so much that hand-held exposures are almost sure to result in blurred negatives—and the more powerful the lens, the sturdier the tripod you'll need. *MINICAM* for May will discuss this and many other problems in buying and using telephoto lenses.—Ed.

Borderless Print Easel

Here's one way to avoid the print trimming drudgery that often follows an evening's session of enlarging. The new Artco Borderless



print easel, just announced, permits you to make enlargements using the full sheet of paper.

SPIRATONE proudly presents:

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Spiratone Wideangle lenses are the first offered at this unusually low price for almost all 35mm cameras. The Wideangle more than doubles your picture area—a must for interior and architectural shots. Picture taking in narrow spaces, of large groups in small rooms, is now at last possible! No increase exposure or change in opening is necessary.



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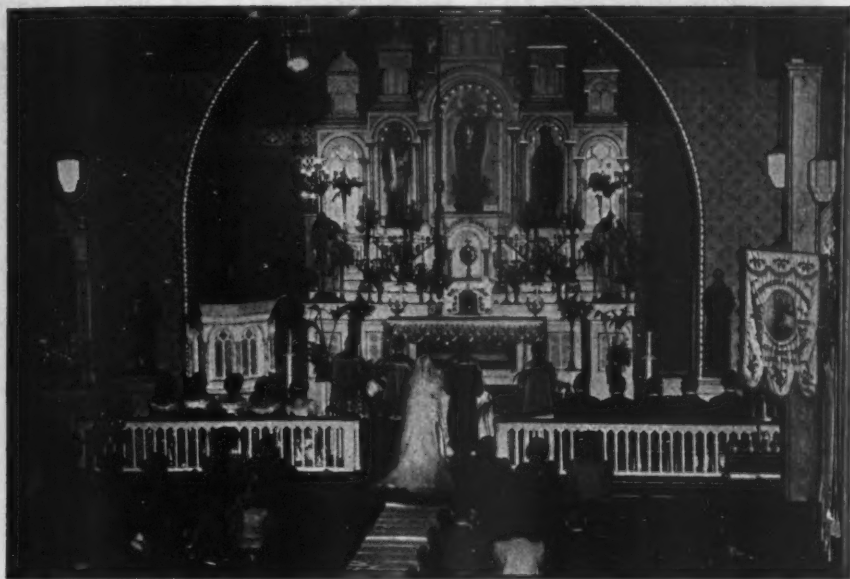
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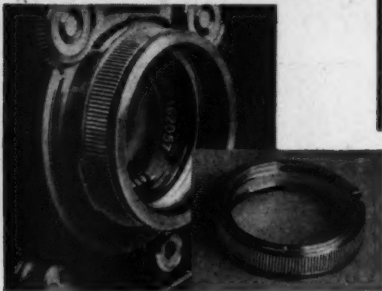


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SEE PAGE 10



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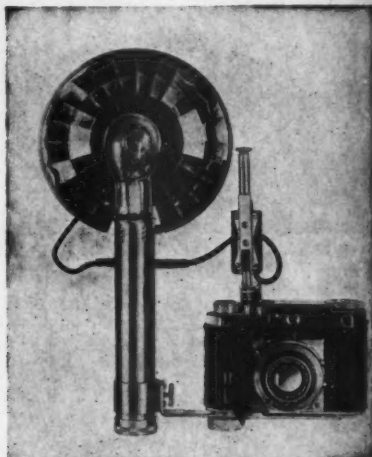
San Antonio 4, Texas

with no margins around the print. It's built in two sections—a flat top surface with holes backed by adhesive patches, and a base for keeping the easel in place. Worn out adhesive is easily replaced with new patches. The Arto Borderless Print Easel is available from the manufacturer in 8" x 10" size for \$2.50 and in 11" x 14" for \$3.10

The Artcrafters Industries
158 South Collingsworth
El Paso, Texas

New Mendelsohn Speedgun

Mendelsohn Speedgun Company announces the first of a new series of Speedguns designed to save wear and tear on the shutters of cameras equipped with body-type releases. The new Speedgun is built to work on the body release of the camera rather than through the shutter itself—the magnetic tripper, mounted on a special chrome plated bracket directly over the



camera body release, is capable of synchronization at all shutter speeds.

Constructed of lightweight dural, the Speedgun comes equipped with a five-inch, chrome plated, aplanatic Twinflexor; a positive action thumb switch, with safety catch to prevent accidental firing; and bulb ejectors for both midget and standard sockets. All electrical contacts are silver plated.

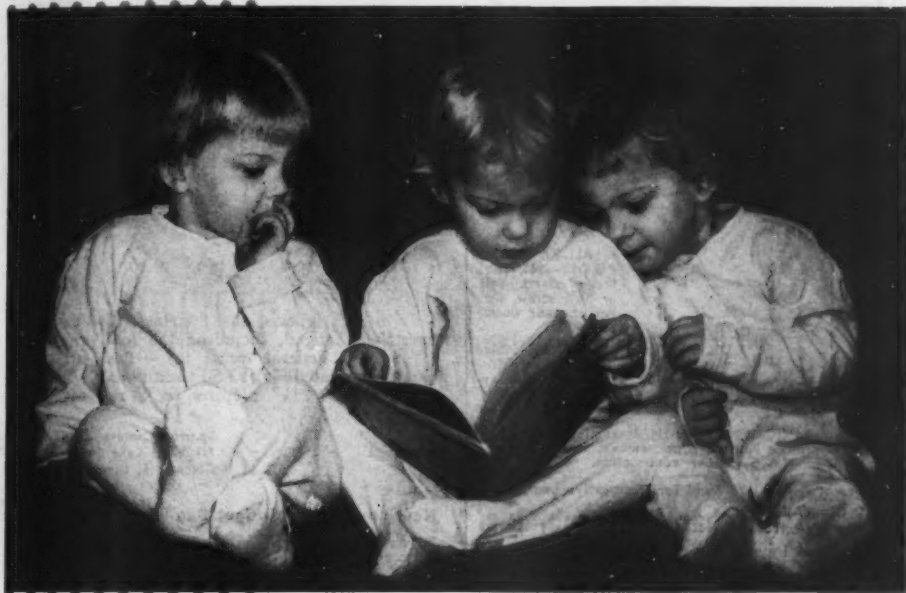
Four models are already in production: No. 1027 for Kodak Retina I with F:3.5 lens; No. 1028 for Retina II with F:2 lens; No. 1029 for Retina II with F:2.8 lens; and No. 1030 for the Super Ikonta B. Eventually Speedguns will be built to fit all cameras with similar body shutter releases. Price on all models is \$29.80—free literature is available from

Mendelsohn Speedgun Co., Inc.
Department NR-3
Bloomfield, New Jersey

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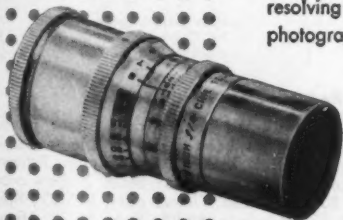
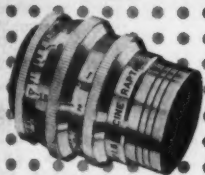
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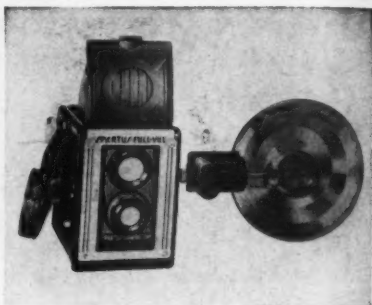
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chronized for flash, it is announced by the manufacturer. Also another improvement, a sportsman view finder for fast eyelevel shooting, has been added.



In other respects, the Spartus Full-Vue remains unchanged, including the low price of \$9.98 with Federal excise tax—flash attachment illustrated is \$3.50 additional. Takes twelve 2 $\frac{1}{4}$ " x 2 $\frac{1}{4}$ " pictures on a roll of No. 120 film.

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New Low-Priced Gadget Bag

No need to leave your camera behind after this if you have one of the new Apex No. 650 Carry-All Bags. There's plenty of room for your

camera and all your accessories—even if you're toting a 2 $\frac{1}{4}$ x3 $\frac{1}{4}$ Speed Graphic.

The bag measures 9" x 12" x 4 $\frac{1}{2}$ ". Inner pockets hold camera and equipment and keep it in place; outside pocket provides that extra bit of space you can

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253 Court Street
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Price Reduction on Movie Editors

One step toward lower prices in the photographic field has been taken by the manufacturer of the Baia line of Movie-Action Editors. New prices are as follows: 8mm Editors complete, \$54.50; 8mm Viewer only, \$35.95; Splitter, \$9.95; Rewinds, \$8.95; Base, \$3.75; 16mm Editor complete, \$59.50; 16mm Viewer only, \$39.95. There's a start—let's hope it will become a trend.

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A burned out flashbulb makes a handy circuit tester for your flashgun and auxiliary equipment. After carefully breaking away the



glass from the base, you have left a glass column and an inch or so of wire. It's a simple matter to wrap one strand of wire around the screwbase of a flash-light bulb and twist the other strand so it touches the base contact, as shown at left. A couple of drops of solder and the job's permanent.

Just put the tester in the socket of your flashgun or extension and press the release—if it lights, all's well. If not, better check before you waste your film and miss a good picture.

Soft Enlargements

Here's a handy expedient for diffusing your prints when projection printing. Hold a smoothly stretched bit of crinoline, cheesecloth, or sheer silk between the enlarger lens and the enlarger easel during a part of the print exposure time. The closer the cloth is held to the bromide paper, the more pronounced the characteristic pattern of the cloth will appear in the final print. The effects obtainable with a little experimentation resemble those produced by an assortment of texture screens.

Curling Prints

If you have experienced trouble from excess curl in your photographic prints, you can probably place the blame on conditions of extreme dryness, high temperature, or both. Also, forced drying frequently tends to increase this fault.

To help remedy excessive curl, rinse the prints briefly in a weak solution of ethylene glycol (available also under the name of Flexogloss) immediately following the final wash. Solution strength should be in the neighborhood of 1, 2 or 3%, dependent upon the severity of the condition. Glycerine may also be used in a similar manner, although it is not preferred, since it decomposes faster.

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No. 33, for two 35mm 40-exp. rolls	11.85
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AGAWAM PRODUCTS Rumford 16, R. I.

Magnum

(Continued from page 51)

continent of Africa.

When Gandhi broke his fast, Cartier was there. The afternoon of the assassination Cartier and his wife had an interview with Gandhi. In Carter's words:

"Eli and I had an interview the afternoon of his death at 3:30. I showed him some photographs and he was especially interested in the picture of Paul Claudel passing by a hearse and asked me to explain, and I told him of the importance of the problem of death for Claudel. He gave his blessing. . . I was to accompany him on February 2nd, the day after tomorrow, to his retreat at the Ashram of Varda."

When three things—the idea, the photographer, the event—mesh, a great story emerges. In this case the idea (the rebirth of the Orient as a world power), the photographer (Henri Cartier-Bresson, with all that he implies as a sensitive man), the event (Gandhi's assassination), meshed. The result is a high point of photographic history. The result is also proof that living photographically produces great photography. For the pictures appeared in the "In and Out of Focus" show at the Museum of Modern Art last year, in *Life*, *Harper's Bazaar*, *Illustrated*, *U. S. Camera Annual*, in Scandinavia, and throughout the Continent.

There is no question that Lady Luck is the guardian angel of Magnum's boys. For she has managed to see that the news-break occurs whenever the Magnum photographer and camera are ready. She managed it nicely during Capa's trip to Israel.

The correspondents had been stuck in Tel Aviv for many days waiting to get up to the front. Finally, truce was declared and they were to go up next morning. They had a poker party in celebration. Capa won so much that he didn't want to stop. When the cold grey dawn arrived, he had been asleep for a matter of minutes—so he slept through the convoy's departure and awakened to find himself alone. He

shrugged his shoulders, put his camera around his neck and went over to the hotel for breakfast, intending to eat, and then talk somebody into driving him up to the front. His breakfast had just been served, on the peaceful balcony facing the Mediterranean, when suddenly people on the beach below him began shouting and pointing excitedly toward a ship coming in. It was the illegal Irgun ammunition ship, "Altalena." Haganah soldiers took up their positions and began firing. Capa, still seated at the breakfast table, was able to cover the entire story without leaving his half-finished meal!

Photographically, Magnum photographers' efforts spring from the European tradition of the small camera and the almost exclusive use of natural light. Their purpose is to take pictures, quickly, unobtrusively. Cartier-Bresson's presence passes unnoticed in a roomful of people. He confines himself to a Leica and a Contax range of adaptability. Capa and Seymour

use the 35mm camera in the same way. At times (but not often enough for it to become a habit) they use a Relflex. The $2\frac{1}{4} \times 2\frac{1}{4}$ is the largest camera in their store of equipment. When artificial light is used, it is used so subtly that the casual reader will not notice it. The quality of their photography is eye-naturalness. There is none of the mannered virtuosity of the flash-happy American magazine man. Technique, good or bad, never obtrudes into a Magnum photograph. The entity of the photograph is the thing which strikes the eye.

Yet their work is not that of "documentary" photography—a word sometimes misused to describe it. For their job is not one of simple recording. An interpretation of an event is the attempt on the part of the photographer to tell you what he personally feels about the event.

True also to the tradition of European photography is the Magnum attitude toward printing and developing—let

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someone else do it. Their job is primarily one of coverage. They do not get the joy from printing, do not recognize its necessity as an intrinsic part of the photographic process as do such American photographers as Ansel Adams, Edward Weston, Paul Strand, W. Eugene Smith.

Thus, they are kept from complete mastery of their medium. Capa never learns where he errs in composition; Cartier, for all his skill, may miss a chance to sharpen emphasis by darkroom control.

Although Magnum has existed for more than a year and has done great things, there is another side to the coin. Nothing good is accomplished without hardship and sacrifice. Sometimes the stories on which they spend their love and talents and time are not sold. In Palestine, Capa risked his life and was wounded in the fighting, yet although he sold his Altalena story immediately, he did not sell many of the other stories. A few of his pictures were used in the I. F. Stone book "This Is Israel."

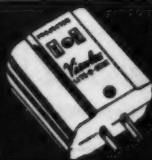
Thus, the record is one of occasional set-back, as well as success. The choice is not an easy one to make. For there are few people willing to risk years of their lives for an idea. Their creed is that photographic reporting should not be as an imitative medium—but as an art, alive in its own abilities.

One must live photographically. In that four-word sentence and its realization is both a simple idea and a revolution. The simple idea is that a photographer should live the same life as any other artist. He should be able to look at the world about him, select from it what he wants to express, and carry that expression through using his utmost talents. Once this is done, he must get his work to the greatest number of people possible.

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A few photographers have lived that way. Edward Weston is one; Paul Strand another; yet neither of these men is concerned with interpreting the events of the world journalistically. And it costs vast amounts of money to travel to China to take that last look at Peiping, to move from New York to the Caucasus, from Capetown to Cairo.

The young photographer, the man who lives now as these three lived when they conceived the idea, is the great future concern of this group. Magnum knows that one must eat, raise a family, exist. They want to help, to further the creative spirit of those who want to be photographers.

Thus far Magnum has not bought pent-houses for its members. But it has given them self-respect and the freest working conditions they have ever enjoyed.

THE LAST WORD

(Continued from page 14)

did, I snapped it, and five seconds later the picture was gone, because the pilot was writing the E. Used a Leica D, Elmar 3.5 1/200 at f11 with K2 filter, Plus X film developed in Finex. I'm sorry about the few white spots on the print but I'm no good at retouching glossies.

Nat. Photo Dealers Magazine
43 Park Avenue JOHN WOLBARST
New York City

Blind to Beauty

Sirs:

Every day for twenty years I've gone to work in the steel mill pictured in your March issue (Shooting the Stars, p. 34—Ed.), much of that time on the night shift too. Maybe the old saw about not seeing a thing for looking at it is true, because I've never seen the mill look so beautiful or romantic as Mr. Karnosh has photographed it.

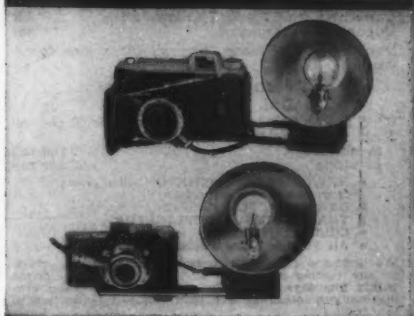
Cleveland, Ohio JOHN JUZWIAK

Who Has The "Know-how"?

Sirs:

I have a large quantity of old 5x7 glass negatives which are to be scrapped. I would greatly appreciate any information that MINICAM's

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(Illustration of Flash Unit on Kodak Tourist and Compak Passive on Argus A-2)

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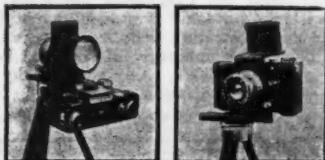
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readers can give me relative to a process for reclaiming the silver contained in these. If possible, I also wish to reclaim the 5x7 pieces of glass, also.

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Johnstown, Pa

E. I. RUMRIL

Too Much Flash?

Sirs:

You comment (January issue, p. 64) on the subtle difference in quality between U.S. and foreign photography. As an enthusiastic English reader of *Minicam* and many other U.S. magazines, I will be bold enough to try to define it.

Your pictures are almost always technically excellent, but as an interpretation of the world around us, they often suffer from overstatement. Larger, brighter, and sharper than life, they leave nothing to the imagination.

In Europe few photogs make much use of flash, except for bad weather and night news work. Perhaps we are just out of date; but some of us think it requires more skill to adapt and utilize natural lighting, rather than banging off a battery of flash bulbs or stroboscopes costing thousands of dollars. You, my friends, in your enthusiasm for new gadgetry, are in danger of becoming strobo-slaves, and thus forgetting how to strive and contrive to capture the elusive quality of reality in this life, which is quite exciting and beautiful enough as it is.

Well, maybe I'll have started something with this piece of plain speaking, and I ought to be prepared to back up my views concretely; so



here is a very simple little "candid" to show you what I mean, taken on my Rollei with nothing more than a shaft of evening sunlight in an Indian village.

London, Eng

DOUGLAS DICKENS

CAMERA CLUB

NEWS AND IDEAS

MANY CAMERA CLUBS are arranging—or have arranged—to have prominent speakers who excel in a particular branch of photography speak at one of their meetings. This can usually be done at a minimum of expense to the club, for many such speakers will be glad to talk before a club if he happens to be passing through the city on his way to a more distant point. Or, if the speaker in mind is not contemplating a trip, the chances are he can be had to talk before the club for the price of the round-trip train fare from the speaker's city to that of the club. It might be well for the program chairman to query a particular speaker in which his club is interested.

The Cinema Club of San Francisco had for its speaker, Mr. Harris P. Tuttle, A.P.S.A., of Eastman Kodak Company, who talked on "Getting the Most Out of Color Film." Mr. Tuttle also gave his talk before the Oakland Camera Club. Mr. Nicolas Haz gave a talk on "Secrets of Color Composition" before the Cleveland Photographic Society. Mr. Paul A. Sperry of New Haven demonstrated the dye-transfer color printing process before the Springfield Photographic Society of Massachusetts. The Woonsocket Camera Club (Rhode Island) had the famous photographer, Mr. Cecil Atwater, whose subject was "The Salon Print and How it Gets that Way." Mr. Howard Chapnick, one of the Photo Editors of "Black Star," gave an illustrated talk on "Photo Journalism" before the Trenton Camera Club of New Jersey.

Have you ever considered sending a set of your club's prints to another club for criticism? The Topeka Camera Club did just that when a set of their prints was sent to the St. Louis Camera Clique for their viewpoint. The members of North Shore Camera Club of Massachusetts had an opportunity to bring in prints for criticism by Mr. Richard C. Cartwright. The Denver Council of Camera Clubs has published in its monthly bulletin *Photogram*, a most excellent article by Mr. Carl Blaurock, titled "High Altitude Color Photography."

Is your club considering a field trip? The Flint Lensmen Camera Club, in their bulletin, *The Focus-Cloth*, tells of a night field trip which they planned. Since there certainly is not an abundance of night scenes, this may be well worth considering. Here's another idea regarding subject matter given us by the New England Council of Camera Clubs. If you run out of assigned subjects, or get awfully fed up with the usual repetition of landscapes, children, architecture, and what have you, try "Cups and Saucers." It sounds provocative and is a good test for your imagination and technique.

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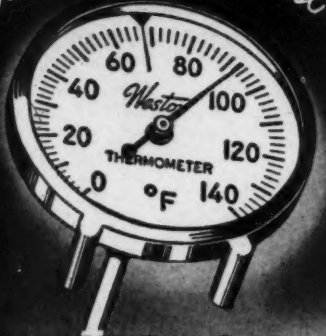
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BOOK REVIEWS

By Clarence Koch

Complete Introduction To Photography

By J. Harris Gable

Harper & Brothers, \$3.50

WRITTEN by the former Associate Editor of the *Journal of the Photographic Society* and first published in 1940, this book is a completely revised edition. The author has, in effect, written this book primarily as an elementary course for one desiring to elect photography as a basis for a profitable hobby or even a professional career.

This book is divided into four parts. Part I, "Theory of Photography," concerns itself with the photographer's tools—camera, lens, film and accessories. Part II, "Picture Taking," is precisely as the title indicates, and includes outdoor and indoor pictures, portraits and posed pictures, special subjects, and movies. Part III, "Darkroom Work," deals with developing, printing, and finishing, enlarging, the darkroom and special darkroom work, color prints, and exhibiting. Part IV, "Laboratory Manual," lists the various formulas used in photography such as film and paper developers, fixers, hardeners, toners, and the like.

In its 270 pages of clear, non-technical instruction, this book contains 37 illustrations and 64 diagrams.

Photography Indoors

Camerette Photo Library

The Camera Magazine, \$3.50

SEVERAL of the chapters contained in this book are from a collection of *Camerette* sections previously published in *The Camera* magazine. Many readers will recognize such authors as—Gottlieb Hampfner, Norris Harkness, Dominic Chiesa, Grace Hooper, Anthony Edwards, and Mark Mooney, Jr.

Each of these photographers writes of his own specialty. Dom Chiesa and Gottlieb Hampfner handle the photography of flowers, the former on the use of daylight through the window; the latter, on artificial light. Anthony Edwards gives us the necessary information on copying. Grace Hooper has the largest representation and discusses still life, table-top, photo drawings, greeting cards, and overlays to decorate Christmas cards. Mark Mooney, Jr., covers the field of trick photography and he, also, has a chapter on photographic greeting cards. Norris Harkness gives instructions for building a folding stand for copying.

This book contains 12 chapters, 192 pages, and over 180 illustrations.

Better Color Movies

By Fred Bond

Camera Craft Publishing Company, \$5

FROM THE PEN of the author of *Kodachrome* and *Kodacolor* and, more recently, *Kodachrome* and *Ektachrome*, now comes this worth-while addition for the movie fan. In response to a number of requests for such a book, Fred Bond, one of the first to use Kodachrome movie film, has correlated in an interesting manner the essential steps vital to successful color movies. Included in the 15 chapters of the book are all the more common color problems of the amateur movie maker.

In order to realize the completeness of the book, the chapters are listed: 1. Fundamentals of Better Color Movies. 2. Sunlight Characteristics. 3. Color and How To Use It. 4. Exposure Calculations. 5. Outdoor Color Movie Problems. 6. Sunsets, Night Street Scenes, Special Effects. 7. Color Movies by Artificial Light. 8. Filters For Shooting Color Movies. 9. Theatricals, Indoor Sports Events. 10. Shooting Flowers, Indoors and Out. 11. Close-up Movies of Small Objects. 12. Color Continuity. 13. Editing and Tiding. 14. Lenses and Auxiliary Attachments. 15. Better Projection For Better Movies.

This book contains 156 pages, 16 color plates, and 70 black-and-white illustrations.

Photo-Flash In Practice

By Geoffrey Gilbert

Focal Press \$3.50

THIS IS PERHAPS one of the most complete books on flash photography to reach the public to date. Written by a successful professional photographer, it is the product of wide practical experience and includes many examples of what may be achieved with flash.

A few of the many interesting points in the book are: How to engrave half stops on a lens for obtaining critical exposures in flash photography with color film; how to make and use a rapid flash calculator which is, in the writer's opinion, superior to any of the commercial calculators on the market to-day; and how to control synchro-sunlight.

The significance and value of the book can be best ascertained by a list of the chapters which includes: "Flash and its Action"; "Flash and Current"; "Flash and its Reflector"; "Flash and the Negative"; "Flash and Daylight"; "Flash and Color"; "Flash and Infrared"; "Flash and the Shutters"; "Flash and Camera Types"; "Flash and Magnetic Guns"; "Flash and Mechanical Guns"; "Flash and the Subject"; "Flash and the Future"; and "Flash and the Makers."

In the 250 pages of useful information are 51 illustrations, 67 diagrams, and 30 charts, each of inestimable value to the photographer working with flash.

All the books reviewed in this column are obtainable from the Book Department, Minicam Photography, 22 East Twelfth Street, Cincinnati 10, Ohio, postpaid, at the prices indicated.



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Grandma Was A Gibson Girl

(Continued from page 53)

You might even plan a group of four generations of womenfolk in your family and include a modern miniature of your wife or daughter.

But don't by-pass the men as you go through the album. The old daguerreo-type of great-grandfather would make a fine modernized miniature. Wearing a sombre suit, with a large cravat and starched white collar, his brown eyes and dark hair could be set off—with all sobriety preserved—against a warm colored background. Then there's great-uncle Jeb who always wore the snappiest "hoo-rah!" outfit the mail-order books offered (\$8.75 postpaid, galluses included). The family was always afraid that Uncle Jeb would disgrace them but he never did—quite—and rather than disgrace your walls, his miniature may enhance them.

Once you have selected the album pictures to be converted into miniatures, I suggest that you find frames right away because it is easier to make a copy for a frame than to force a frame to fit a copy. In regular art supply shops you will find quite a variety of attractive frames, but oftentimes you will find frames more to your liking in second-hand or antique shops. I especially like to buy black ebony frames about 5"x7" in size with gold-rimmed, oval picture openings. Whenever possible, I buy them in pairs so that the miniatures that seem to "belong together" can be displayed that way.

A camera with a ground glass back is best suited for copy work but you can also use cameras with which focussing is accomplished by rangefinders, or by measuring subject-camera distances in feet. Since it is important to get a sizable image on your film, you may want to use a "close-up" or "portrait" attachment over the lens of a miniature camera.

The print to be copied can be tacked on a wall or door. If you use a camera with ground glass focussing, tack the print to the wall in an upside-down position so that it will appear right-side-up through the ground glass and thus be easier to see. With your camera mounted on a tripod, move close enough to the album print to obtain a large, sharp image in the viewing device. To avoid distortion, make certain that the film is on the same horizontal plane as the copy picture.

Two photofloods in reflectors will supply ample illumination. For best results, the print must be evenly illuminated and show no hot-spots or reflections from the light sources. With one photoflood on each side of the camera and at an angle of about 30 degrees from the print, most hot-spots are eliminated. If any remain, try raising the photofloods slightly above the level of the print, or moving the lights a little farther away from the print.

No special film is required for copying, though panchromatic film should be used if the subject is in color. If you use an exposure meter, you can place a neutral gray card over the print to be copied and give roughly twice the exposure indicated for the gray card. This particularly applies for copy-work in which the lens is racked way out. I usually make several exposures, however, in order to have a choice of densities from two or more negatives. My first exposure, as a rule, is about 1/10 sec. at F:8; the second exposure is 1/10 sec. at F:11, and so on.

Miniature prints can be made on porcelain (porcelain plate with regular printing paper emulsion), on Ivora (a plastic base with regular printing paper emulsion), or on your usual stock printing paper. I prefer the latter because by sticking to one type of paper my miniatures all have the same appearance when framed under glass. The print may be sepia-toned or given any other warm tone desired.

A black-and-white, or toned miniature is attractive in itself, but if you want to

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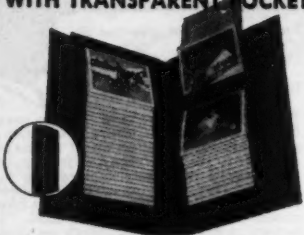
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color your work I suggest that you make your prints on semimatte paper and keep them lighter in tone than normal in order to facilitate the coloring work. An inexpensive set of either transparent water-colors or transparent oilcolors (made especially for this purpose and available at most photo supply dealers) will provide all the equipment needed. These set range in price from \$2 to \$10 and come with explicit instructions.

Don't be discouraged if you spoil a few prints in the beginning. The knack of using the colors properly will come to you as you go along. Try to approach your work with a clear plan—a vision of the color selections best suited for complexions, eyes, hair, the dress, trimmings, and background. Avoid bizarre color schemes and be especially subtle in your choice of the important colors of skin, dress, and background. A delicate tone, or even a light water-color tint, will invariably prove more becoming than a garish display of color. If you make a mistake, delicate colors are far more easily removed for a fresh start than deep colors. The reward for persistency of effort will be a miniature or group of miniatures which, as family heirlooms, can replace some of the meaningless pictures in your home.

Warning!

Forged Zeiss lenses have appeared on the market recently, it is announced by the American distributor, Carl Zeiss, Inc., 485 Fifth Avenue, New York City. The lenses are new and coated—not lenses attached to imported cameras. They are engraved with "Carl Zeiss, Jena," and with a red "T," but are of inferior quality and their mounts are so poorly made they do not fit the camera mount. One such model, known to be forged, is the Sonnar F:1.5 lens in Contax bayonet mount and also in the Leica mount. If you're wondering how to tell the wheat from the chaff, Zeiss states that the relatively low prices at which the imitation lenses are offered, should arouse suspicion.

1001 Prints From 1 Negative

(Continued from page 70)

After the first positive transparency (made from the original negative) is dry, a negative transparency is made from it in exactly the same manner described above. This goes on until you get tired of making "different" positive-negative transparencies, one from the other, and decide to begin printing from the stock pile you



Self Portrait—Jim Brown

have already acquired. Once you have begun printing positive negative transparencies by contact or enlargement, and either singly or in multiple combinations, the sky is literally the limit. But while experimenting is one thing, being able to duplicate a given result is something else again. For this reason, I especially urge you to keep a notebook record of each transparency you make, and the combinations you put together in order to create a given effect. If each of your transparencies are numbered, for instance, it is a simple matter to jot down the file numbers of combinations that yield pleasing effects and, later, duplicate this result with ease.

In addition to producing outline effects due to the shrinkage of images, this pro-

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cess tends to "drop" detail. In other words, the ultra-contrast of the film causes all blacks to become clear while clear areas and halftone areas will print completely black by the time the third process negative is made. If parts of the original negatives or positives having a long tonal scale are wanted again, they can be printed in later by combining them with the process negatives being used.

What Makes a News Picture?

(Continued from page 82)

There's a great deal of successful grab shots made by professionals on the spot when news happened. Their cameras said: "Quick—here's a clear peek!"

Not many news photographers went foraging on their own. One man, Barney Cowherd, did, and his picture titled "People, 1948" is one of those fascinating things you can study for fifteen minutes and still see more. The people in it appear to embrace their inwardly turned thoughts; to concentrate on a personal problem of their own, to be strangely oblivious to the maze of souls about them. The photograph reveals what we looked like at a given moment in our history. This fellow moving like a shadow by me—do I know he passes, or care? In this picture we are all so busy, so very, very concerned . . . with ourselves.

Well, so we liked it. What would other city editors do with this picture? Thinking some newspaper photographer would like to know, we asked two of them. At the *Cincinnati Post*, the city editor said: "What's the story? What does it illustrate? We don't send our photographers out just to roam, to shoot pictures when and wherever they like. They're sent on assignment. Would I print this picture? I can't say, Maybe, if one of our men brought it in, because it's a good shot." At the *Cincinnati Times Star*, the city editor said: "Hmm-m. It's nice and clear. But where's the accident? Lot of people in it all right. If it told a story I could use it."

A picture such as this is a grace note

in photographic journalism; it competes for space successfully with local news. Perhaps publishers will encourage their city editors to learn more about pictures just as they rightly encourage their foremen of mechanical departments to learn more about linotypes and presses in order to do a better functional job.

A city editor should have catholic picture tastes and in addition know the historical relationship between Dorothea Lange and Gustav Anderson, between Steichen's portrait of Morgan and a society news shot, between Skippy Adelman's view of Tommy Manville and a chorine (*Minicam*, April, 1945) and a mug shot of that gentleman headed: **PLAYBOY MARRIES AGAIN**. He needs this knowledge just as much as he needs to know the news coloration of INS international feature stories or what news off the State wire needs local leg work.

Unposed, natural pictures of people that express a moment, not just any casual moment, but a photograph of people who by some blessing of circumstance express the quintessence of the instant, will freshen the pages of a newspaper. The editor who saw Barney Cowherd's shot and used it, was Cary Robertson of the *Louisville Courier-Journal*. Pictures like Barney Cowherd's will encourage more newsmen to mix originality with their thinking.

Mr. Cowherd says: "I was proud when the Museum of Modern Art used four of my pictures in their show. About "People, 1948," I can't understand the comments it creates. Some people are depressed by it; everyone finds their own interpretation in it. Really, I didn't mean any more than to say this is what people looked like, this year, and make of it what you will. *Minicam's* interpretation of this picture suits me, but I didn't think that far into it when I made the shot. I did it on my own time, returning from an assignment. I do a lot of shooting around town to try to catch the spirit of the city, and hope to improve my understanding of people by this work. I think people are the guts of the world and all I am trying to do is understand them."

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My Favorite Picture

(Continued from page 41)

enough to soup a dozen negatives, gulp black coffee from a paper cup, and explain courteously to a former client (for the third time) that no ethical free-lance photographer will sell a negative for five dollars—not when the client intends to have a cut-rate photo printing outfit make two thousand advertising prints from it.

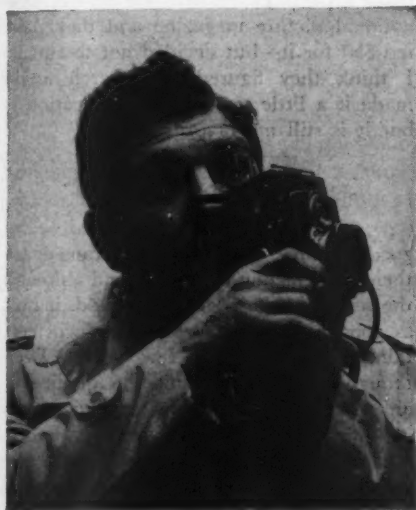
Mickey got into professional photography by simply jumping into it with both feet. "Until 1945, I played with picture-making as a casual hobby," he explains. "Then one day I laid down my tools in a muffler manufacturing shop and went out and bought a 4 x 5 Graphic and some accessories for \$350. The next day I declared that I was a photographer (although I didn't know how to load a film holder), and went out and got some accounts. On my first two assignments all the pictures turned out blank because I forgot to open the back shutter on the Graphic. So I went out and got two more accounts which incidentally, are still with me.

"At first my finishing was done by some fellows in a commercial studio but after two weeks I decided that I too could mutilate a print, so I talked my mother-in-law into letting me move all the dishes out of her pantry in order to set up an enlarger and developing tanks. My first prints were wonderfully sad but once I got the hang of darkroom work I began to enjoy it. (This statement identifies Mickey Pallas as a professional phenomenon—Ed) Before long I had to rent outside space to handle the business that came my way, and two years ago I opened this studio. You can see for yourself what a small free-lance studio operator has to be able to handle nowadays."

Judging by Mickey's bulging files, a free-lance studio cameraman nowadays is apt to be called upon to photograph anything from poodles to paring knives. In a typical week, Mickey completed illustrations for 3 Sunday supplement newspaper stories, did five magazine assignments, and began work on two additional magazine

assignments. In odd moments he managed to make about 30 portraits, commercial advertising pictures, and spot news shots.

There is a strong documentary flavor to most of Mickey's magazine pictures, partly because he does a great many assignments for *Ebony*, *Our World*, and similar publications, and partly because this is the type of photography that interests him the most. "If I'm ever in a position to call my own shots," he says, "I'll sack every-



thing else just to specialize in magazine documentary work."

Although the fuzzy, out-of-focus picture at the beginning of this article is technically very poor, it is Mickey's favorite photograph. "It was also the toughest picture to get—under the circumstances—that I ever tackled," he reminisces. "There was a lot of agitation about gambling going on at the time it was made. When the official word came out that a lid had been clamped on city gambling, I was assigned to do a little checking up. This scene was one that I stumbled upon in a prominent church basement.

"No one said anything about the 4 x 5 Speed Graphic with flash that I was carrying, but I got the general idea that it would be indiscreet to do anything except dangle it like a suitcase. It so happened,

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though, that I had a Leica around my neck loaded with some D-2 nitrate film that a film producer friend, Haskell Wexler, had given me to try out. The rest of it you can guess. Since there was only the dim room light for illumination, I casually fiddled the lens diaphragm wide open and cocked the shutter for 1/8 second. Then, guessing at the focus, I pointed the camera one way and looked in another direction. The resulting photo made an instant hit with the editors of a national picture magazine and they paid me \$50 for it—but decided not to run it. I think they figured the church angle made it a little too hot for publication—but it is still my favorite picture."

Celebrities

(Continued from page 76)

good picture. Television cameramen are themselves feeling their way, and although the screen image is generally good, it isn't as good as improved equipment will certainly make it in a few years. Even though the image hasn't the quality of an Ansel Adams print, television has captured America's imagination. Everyone's getting in on the ground floor. Amateur photographers can too!

Prints For Vets

Here's an idea that started with the Germain School of Photography in New York. It seems like a good thing and maybe your camera group will want to do something similar for the hospitalized veterans in your community.

To help the vets in New York hospitals pass the long hours, Germain students save all their extra prints, dry them, and pass them along to the Volunteer Service. From here they are distributed to the many different hospitals through the city.

The patients color the prints—some do it for their own amusement, while for others it is occupational therapy. Many of the veterans have become so proficient at hand coloring, they hope to color professionally when they leave the hospitals.

Colorful Spring

(Continued from page 29)

like subject matter, we should also have it in mind so that we can use the inherent nature of color values at this time of year to make a more exciting picture.

There are some tried and true subjects for spring color photographs: girls free-swinging down the street, baby lambs, shooting marbles, jump-rope, roller skating, kite flying, baseball in the street, oiling up the catcher's mitt, crocus, tulips, iris, violets, Easter fashions, taking down the storm windows, fruit blossoms, rolling the lawn, or the youngster cautiously examining a tulip in an apartment house windowbox. These and a thousand others are all hard to pass up; but they're crying for a new angle, a closeup, or even a bit of gentle satire—in addition to good color handling and clean technique.

Haze is one of the few stumbling blocks in spring color work. Many sunshiny April and May days have considerable haze in the atmosphere. Somehow, in Spring, we are inclined to be full of vinegar, and everything seems bright and clear if the sun is shining. To be on the safe side, it might be well to always use a colorless haze filter. It requires no increase in exposure, and not only helps cut through distant haze; but seems to "brighten-up" the entire transparency—especially some of the Ansco color emulsions.

Haze usually means a high percentage of overall blue cast, so that one of the milder color correction filters such as a CC 13 might be in order on those "hazy-sunshine" days.

One important exception might be made on those days when the haze seems to lend a shimmery quality to the light. It is a subtle thing, and often hard to notice; but worthwhile to capture. If you feel it's there, try shooting the scene without the

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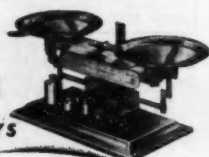
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haze filter, or shoot one with and one without.

From the first of April to the middle of May, there is a big jump from the short winter days to the long summer sun. It is well to remember that in winter the days were short but bright, due to the snow blanket; but in the early weeks of spring they are just short—period. Better open up from F:6.3 to F:5.6 at a 50th if you use the "basic exposure" method; and keep that meter handy. Fleeting clouds and quick-changing weather can be murder to a "basic exposure" addict.

Naturally, we will be faced with a big percentage of rainy days. With a meter, and tripod, and perhaps a pocketfull of blue flashbulbs; we can still go outdoor and come back with some out-of-the-ordinary color photographs of much mood and seasonal atmosphere.

Flashbulbs can save the day by letting you shoot indoors, when the camera has just been loaded with daylight color film, the family has protestingly donned Easter togs for the yearly "dress-up," outdoor record shot—and here comes one of those sudden April showers!

Other than that, spring (and fall) are probably the most ideal times of the year for outdoor color photography. The sun is low enough to prevent that hard, burned-out look that appears at times in summer color shots; and yet high enough to give plenty of the right-color-temperature hours that don't require extensive use of the CC or UV correction filters.

Even if your ideas of "color in spring" differ from your neighbor's, its a cinch most of us will agree that from the time the last snow is gone and the buds begin popping out, to that week when you notice all the trees are finally in full leaf—spring is just about the nicest time of year to make color photographs. Perhaps, too, its not the time of year or the subject matter. Could be just you, and the way you feel. In a few weeks summer will likely seem the best time of year for color photographs. Consistency is not always a virtue; besides, who wants to be an angel?

The Natural Look

(Continued from page 25)

something about it. There must be courses or books teaching how to become brilliant and witty in ten easy lessons. If the model does not enjoy the sitting, if you let her get bored and tired, you will never get the right expression. The expression is the most important part of the picture and usually a photographer is more responsible for the lack of it than the model.

"After the pictures are taken, send the films to Kodak, Ansco, or process them yourself, and by all means keep your fingers crossed. This is of utmost importance."

And to Halsman's suggestions we might add that it helps too, if you happen to have Halsman's know-how and artistic way of seeing.

Mobile Background Screen

(Continued from page 90)

the finished pictures, as they could introduce the very sharp, distracting lines into the composition that the gadget was meant to avoid.

While a cloth covered frame is probably the lightest and most easily handled mobile background, a large piece of cardboard, wallboard, or plywood will also serve. These may be painted, wallpapered, or left natural. Subdued figures and airbrushing for special effects may be employed. Between picture sessions, they take up practically no space, since they can be stored flat against a closet wall.

The illustrations show one instance in which a mobile background improved what was, without it, only a snapshot. Try one in your own work when the opportunity arises, and see for yourself how it can help you get better photographs.

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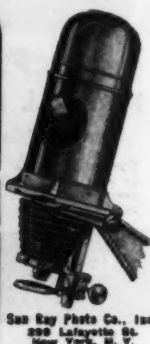
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Shooting Below the Red Spectrum

(Continued from page 38)

combining infrared film and a light source suitably filtered to allow the infrared rays through. This is achieved in daylight by using the dark red filter over the lens. In flash work, it is achieved by dipping an ordinary flashbulb in a dye-lacquer solution which dries hard and tight over the entire surface of the bulb forming a filter jacket. After the bulb has been flashed, the jacket shows a corrugation which comes of the lacquer having been literally cooked into hard ridges by the intense heat of the flash.

Q. Do infrared portraits differ from ordinary ones?

A. There is a very marked, rather weird difference. In infrared pictures, the flesh of the subject tends to appear translucent, with veins lying just under the surface of the skin showing as black lines. Also, red lips appear light and the darkest shade of lipstick seems to disappear. Apparently closely shaven persons seem to have a beard and eyes show up very dark. All this is true regardless of whether you have taken the infrared portrait by daylight, flash or artificial illumination.

Q. How can you focus in the dark for blackout flash?

A. You must know beforehand the approximate distance and set the focusing scale accordingly. The lens diaphragm must be set according to a guide number calculation involving this distance. Approximate guide numbers are in chart shown in this article. Weegee, with typical unorthodoxy, doesn't bother his head about rules but sets his camera for ten feet when making full length figures and six feet for close-ups. His exposures are made in 1/100th of a second at F:16. Ralph Crane of Black Star made a wonderful set of kids at a movie with infrared flash. He focused the camera before the movie started, made a mark on the floor and

made all his shots from the one position. Crane exposed in 1/50th of a second with lens at F:45. (See March '49 issue.—Ed.)

Q. Can you see the infrared flash?

A. Some visible light does escape, as a dim purplish-red glow, but this is usually undetectable except when looking directly at the camera.

Q. Can infrared pictures be taken by ordinary artificial illumination?

A. Photoflood bulbs, studio lighting or tungsten lamps may be used, but they must be screened properly. If pictures are made in darkness, the light source can be screened with two thicknesses of the Wratten filter 87. If you are shooting in light, the lens must be covered with the 25-A filter.

Q. What exposure for infrared pictures with artificial illumination?

A. A good guide to follow is an exposure in 1/2 of a second at F:16, using four No. 1 photoflood lamps in reflectors, at a distance of three feet from the subject. See table for other exposure times.

Q. How do you develop infrared film?

A. Infrared sensitive materials are developed and fixed in exactly the same manner as other films, except that the anti-halation backing on plates must be rubbed off during development.

Q. Can contrast be varied?

A. Yes, by developing for longer or shorter periods than those specified in the detailed instruction sheet that comes with infrared materials. Full development of infrared film produces strikingly dramatic pictures with a poster-like quality. Less development produces pleasing, unusual and somewhat ethereal effects.

Q. What kind of a safelight is used?

A. Infrared film must be handled and developed in total darkness or with a Wratten Safelight, Series 7 (Infrared) used in a suitable safelight with a ten-watt bulb at a distance of not less than three feet from the film or plate. Other safelights cannot be used because they transmit infrared radiation which rapidly fogs

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the film. (The Wratten Safelight, Series 7, is not safe for use with Ortho or Pan materials.)

Q. What developers are used for infrared?

A. Use those recommended by the manufacturer in the instruction sheet packed with all infrared film.

Q. What are the drawbacks of infrared film?

A. Being a slow film, it necessitates longer exposures hence it is difficult to stop movement. Also, until experience is gained, critically sharp focus is not easy to obtain. In portrait work, special make-up has to be used of a dark base for the face and dark brown eyebrow pencil for lips, or the faces look funny. Values in landscape are so different that they cannot be taken as a record shot. And always, there is the necessity for use of a proper filter.

Infrared photography has other uses than those of providing a photographer with an interesting picture. In criminology infrared photography has many valuable applications. Some are: detection and deciphering of erasures and forgery; deciphering of charred documents and those illegible as the result of age or wear; differentiation between inks, dyes and pigments which may appear identical to the eye; ascertainment of the authenticity of old master paintings; detection of stains and irregularities in cloth; examination of fingerprints; study of contents of sealed envelopes and some kinds of secret writing; detection of blood stains on cloth and the apprehension of thieves.

In the medical field, infrared photography shows promise of being useful in diagnosis. The infrared can frequently penetrate the skin and the thin layers of fat near the surface of the body. There have been many applications of infrared photography in technical and scientific fields and they are steadily growing. In plant pathology, infrared photography has provided a valuable means of studying and diagnosing plant diseases in which there is change in the pigment or cellular ma-

terial. Different kinds of wood show marked variations in their transparency to the infrared, which is of value in coal petrology and other fields of paleobotany. The textile industry has applied infrared photography to the detection of irregularities in the dyeing and weaving of cloth. In astronomy, too, infrared has proved of enormous value in discovering and charting large numbers of new stars.

But while the contributions that infrared photography makes to many different fields is interesting reading, the usual photographer will limit his use to that of landscape work or blackout flash. Ordinary pictures of architecture, landscape, portraits or people in action have to represent something very remarkable in order to arouse attention, but infrared—because of its unusual effects—catches attention immediately. Infrared photography can be used as a means of artistic creation where exaggeration is used to emphasize the truth. The camera loaded with infrared film proves its superiority over the human eye by giving access to an overwhelming vision of beauty, form and pattern which we would otherwise not be able to see. And the seemingly magical results are so easy to get—just remember to use the filter always and to stop down as far as possible to correct focus.

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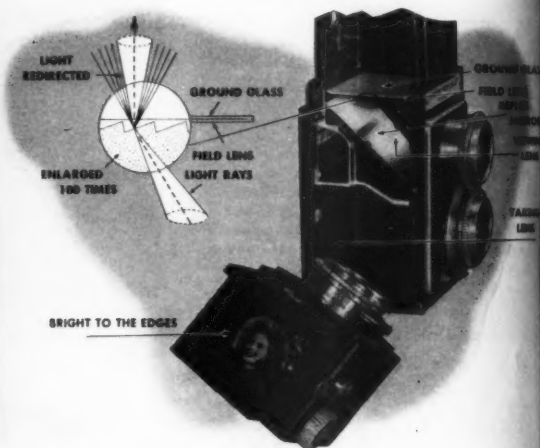


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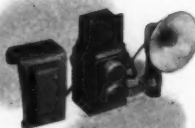


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